

AD-A116 925

ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/8 4/2
20403A ASSAULT BREAKER MISSILE NUMBER 0007 ROUND NUMBER M605.(U)

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Program: General Chemistry
Project Number: 1000 277-1000
Date: October 1960

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Project Number: 1000 277-1000

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INTRODUCTION

20403A Assault Breaker, Missile Number 0007, Round Number M6G5, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 0926 MDT, 08 May 1982. The scheduled launch time was 0900 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 and Jallen Met Sites.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from pilot-balloon observations at:

<u>SITE</u>	<u>TIME</u>	<u>ALTITUDE</u>
LC-33	0920 MDT	2760 meters
LC-33	0926 MDT	2760 meters
Jallen	0840 MDT	2700 meters
Jallen	0925 MDT	2400 meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME

Holloman	0630 MDT
Jallen	0630 MDT
LC-37	0800 MDT
WSD	0926 MDT
Holloman	0925 MDT
Jallen	0925 MDT

Accession For	
NTIS	CDRL
DTIC	EAR
Unannounced	
Jallen	
From	
Dissemination	
Approved for release	
Dist	
A	23



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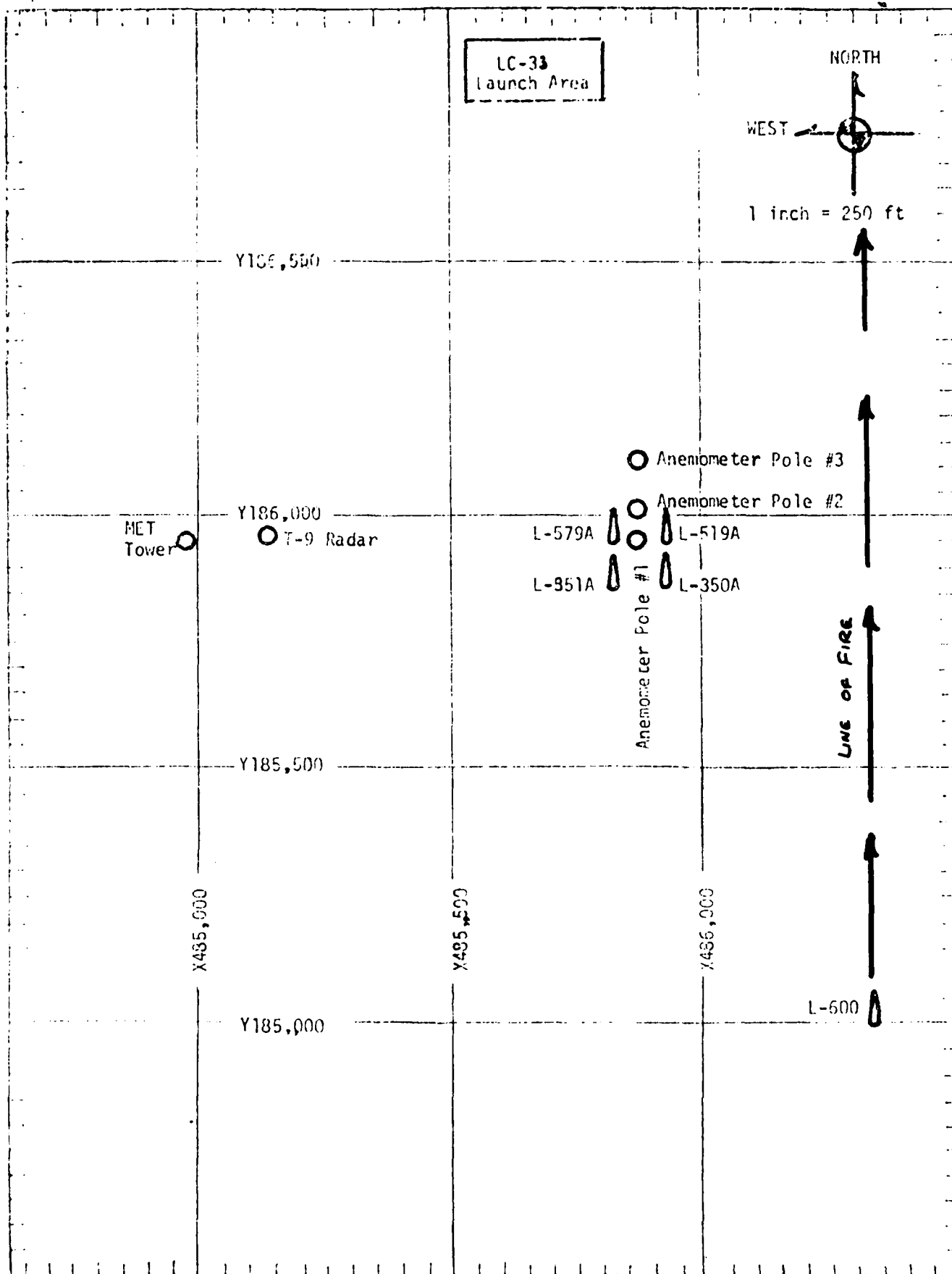


TABLE 1		STATION LC-33 E & A	
DATE 08	May	82	
		$\bar{Y} = 484,982.64$	$\bar{Y} = 185,957.73$
			$\mu = 3983.00$

[illegible][illegible]

TIME:	0926
DRY BULB TEMP.	19.0
WET BULB TEMP.	8.0
WET BULB DEPR.	11.0
DEW POINT	-4.2
RELATIVE HUMID.	20

TABLE 2 LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1 X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL			POLE #2 X485,874.29 Y186,012.00 H4033.57 53.0 ft. AGL			POLE #3 X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T -30		CALM	T -30		CALM	T -30		CALM
T -20		CALM	T -20		CALM	T -20		CALM
T -10		CALM	T -10		CALM	T -10	195	01
T 0.0		CALM	T 0.0		CALM	T 0.0	195	02
T +10		CALM	T +10		CALM	T +10		CALM

TABLE 3 LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 62 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T -30		CALM	T -30		CALM
T -20		CALM	T -20		CALM
T -10	276	01	T -10		CALM
T 0.0	276	02	T 0.0		CALM
T +10	257	02	T +10		CALM

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T -30		CALM	T -30	161	02
T -20		CALM	T -20		CALM
T -10		CALM	T -10	156	04
T 0.0		CALM	T 0.0	156	04
T +10		CALM	T +10	156	02

DATE 08 May 82

[illegible]

INSTRUCTIONS TO VISIBILITY	CLOUDS				REMARKS
	1st Layer		2nd Layer		
	AMT	TYPE	AMT	TYPE	
	3	CS	25,000		

biochemical, genetic, and clinical data.

TIME:	0955
CRY SLD TEMP.	21.0
ACT SLD TEMP.	8.5
NET SLD CORR.	12.5
LOW POINT	-5.5
PERCENTAGE POINTS	16

PILOT BALLOON MEASURED WIND DATA

TABLE 5

RELEASED FROM LC-33

DATE 08 May 1982

TIME 0920 MDT

COORDINATES (WSTM)

X= 486,872.00

$$Y = 184,146.75$$
$$H = 3981.15$$

HEIGHTS ARE METERS AGL X OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
Sfc		CALM
60	115	02
120	143	04
180	MISG	MISG
240	MISG	MISG
300	MISG	MISG
360	MISG	MISG
420	MISG	MISG
480	179	16
540	193	16
600	195	14
660	203	16
720	194	14
780	179	15
840	198	14
900	174	16
960	195	10
1020	188	16
1080	195	11
1140	173	11
1200	197	14
1260	198	15
1320	199	16
1380	206	15
1440	208	20
1500	217	17
1560	219	14
1620	213	19
1680	211	17
1740	225	15

[illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 6

RELEASED FROM LC-33 DATE 08 May 1982 TIME 0926 MDT
 COORDINATES (WSTM) X= 486,872.00 Y= 184,146.75 Z= 3981.15

HEIGHTS ARE METERS AGL X OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
Sfc		CALM	1800	221	17			
60	029	02	1860	219	17			
120	MISG	MISG	1920	219	18			
180	145	07	1980	221	17			
240	153	09	2040	217	18			
300	155	12	2100	219	18			
360	MISG	MISG	2160	219	17			
420	183	16	2220	229	17			
480	178	16	2280	222	18			
540	191	15	2340	233	16			
600	183	17	2400	238	17			
660	181	15	2460	237	18			
720	193	15	2520	234	19			
780	180	16	2580	238	18			
840	186	14	2640	236	18			
900	173	15	2700	236	19			
960	197	13	2760	236	19			
1020	192	16						
1080	190	13						
1140	193	12						
1200	193	12						
1260	204	12						
1320	199	15						
1380	203	15						
1440	207	16						
1500	204	15						
1560	214	16						
1620	220	17						
1680	216	19						
1740	226	16						

PILOT BALLOON MEASURED WIND DATA

TABLE 7

RELEASED FROM Jallen DATE 08 May 1982 TIME 0840 MDT

COORDINATES (WSTM) X= 450,491.60 Y= 464,023.05 H= 4,053.00

HEIGHTS ARE METERS AGL X OR FEET AGL .

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	050	02
60	053	02
120	055	03
180	056	03
240	057	03
300	058	04
360	059	04
420	065	02
480	099	01
540	205	01
600	220	03
660	224	04
720	225	06
780	225	08
840	225	09
900	226	11
960	226	13
1020	225	13
1080	225	14
1140	225	15
1200	224	16
1260	224	16
1320	224	17
1380	225	16
1440	226	16
1500	226	16
1560	227	16
1620	227	16
1680	227	16
1740	226	17

[illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 8

RELEASED FROM Jallen DATE 08 May 1982 TIME 0925 MDT
 COORDINATES (WSIN) X= 450,491.60 Y=464,023.05 Z= 4,053.00

HEIGHTS ARE METERS AGL X OR FEET AGL

HEIGHT FT	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
Sfc	110	02	1800	216	17			
60	122	02	1860	216	17			
120	122	02	1920	217	19			
180	122	02	1980	218	20			
240	122	03	2040	219	21			
300	122	04	2100	220	22			
360	124	04	2160	221	23			
420	132	04	2220	222	23			
480	140	05	2280	223	23			
540	147	05	2340	224	23			
600	153	05	2400	225	24			
660	158	06						
720	166	06						
780	174	06						
840	182	07						
900	188	07						
960	193	08						
1020	198	09						
1080	203	10						
1140	207	10						
1200	211	11						
1260	214	12						
1320	215	13						
1380	215	13						
1440	216	14						
1500	216	14						
1560	216	14						
1620	216	15						
1680	216	16						
1740	216	16						

TABLE 9

AIMING COMPUTER MET MESSAGES
08 May 1982

Jallen 0630 MDT

METCM1332065

081250124876

00622003 27610876

01361011 28630866

02633008 28910841

03404009 28870802

04440010 28320756

05466014 28170711

06448020 27540669

07445021 27080629

08446018 26450590

09442019 26120553

10457024 26120518

11432029 25350485

12430034 25020438

13444033 24100381

Holloman 0630 MDT

METCM1329061

081250124873

00142004 27790873

01352007 28960863

02366010 29070838

03392009 28500799

04435009 28470753

05465014 28230709

06461020 27620667

07453022 26880626

08444025 26880588

09438032 26340552

10448030 25870517

11443032 25270483

12429035 25090437

13452034 24110380

STATION ALTITUDE 1120.54 FEET MSL
8 MAY 62 0630 MDT
ASCENSION IS. 133

SIGNIFICANT LEVEL DATA
120019100
HOLLOWAY
TABLE 10

RELATIVE HUMIDITIES
32.00005 LAT DEG
106.099465 LONG DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE FEET	AIR TEMPERATURE DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT
873.3	4126.6	4.2	36.0
888.6	4274.0	16.3	30.0
863.9	4426.0	18.5	20.0
850.0	4881.0	17.9	25.0
837.5	5296.6	16.9	25.0
821.0	5832.4	17.1	25.0
760.0	10226.7	5.7	34.0
650.4	12100.3	1.2	38.0
584.1	15877.4	-9.5	49.0
550.4	16591.1	-10.4	36.0
534.2	17255.1	-12.0	26.0
500.0	18306.4	-16.2	24.0
431.6	22096.2	-23.6	23.0
424.4	22200.8	-23.6	22.0
400.0	24316.9	-26.4	22.0
321.9	29557.2	-38.5	20.0
300.0	30942.2	-41.0	
256.0	34930.0	-50.8	
200.0	39612.1	-61.4	
191.7	40477.1	-62.0	
186.4	41046.5	-63.5	
173.8	42406.8	-62.4	
165.2	43496.4	-63.5	
150.0	45454.5	-62.6	
145.6	46050.8	-63.3	
137.4	47235.5	-62.6	
129.4	48465.3	-59.2	
125.0	49048.5	-59.1	
104.7	52811.5	-62.9	
106.0	53748.3	-61.3	
78.8	58583.3	-65.1	
70.0	61001.3	-58.9	
62.8	63231.5	-62.5	
55.5	65650.1	-60.7	
54.0	66330.7	-56.5	
50.0	67946.0	-56.0	
47.2	69163.2	-53.8	
42.6	71321.3	-55.6	
37.6	73792.7	-52.5	
30.0	76810.6	-52.0	

CLOUDS
 32.00005 LAT DEG
 100.00005 LON DEG

SIGNIFICANT LEVEL DATA
 1200010100
 100.00005
 TABLE 10 Cont'd

STATION ALTITUDE 4120.59 FEET MSL
 8 MAY 82
 ASCENSION 110. 103

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		RELATIVE PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
27.2 80926.9	-48.4		
20.0 87679.6	-44.8		
13.8 95927.5	-43.1		
10.0 103178.9	-39.2		
9.2 105069.9	-39.9		

STATION ALTITUDE 4125.59 FEET MSL
8 MAY 62 0630 MDT
ASCENSION 140. 133

UPPER AIR DATA
LEGEND
HOLLOWMAN
TABLE 11

GEOMETRIC COORDINATES
32.00805 LAT DEG
106.09905 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY AL/CUBIC FEET	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	WIND KNOTS	INDEX OF REFRACTION
4125.0	875.3	4.2	36.0	1095.5	649.2	090.0	4.1	1.000259
4500.0	861.6	18.4	27.5	1020.9	660.1	129.2	2.2	1.000255
5000.0	846.4	17.6	25.0	1011.0	665.0	197.4	4.5	1.000248
5500.0	831.4	17.0	25.0	990.1	664.3	211.6	8.3	1.000244
6000.0	816.6	16.7	25.3	979.4	664.0	210.2	10.7	1.000240
6500.0	801.9	15.4	26.4	966.1	662.5	210.5	9.6	1.000236
7000.0	787.4	14.1	27.4	953.0	660.9	223.4	6.7	1.000233
7500.0	773.2	12.3	28.4	940.1	659.4	231.9	8.2	1.000229
8000.0	759.2	11.5	29.4	927.4	657.9	241.0	6.7	1.000225
8500.0	745.5	10.2	30.5	914.5	656.4	243.9	9.6	1.000222
9000.0	732.0	8.9	31.5	902.5	654.9	253.5	11.2	1.000218
9500.0	718.8	7.6	32.5	890.4	653.5	259.0	12.7	1.000215
10000.0	705.8	6.3	33.5	876.4	651.8	261.1	14.4	1.000211
10500.0	692.9	5.1	34.6	860.1	650.4	261.9	16.2	1.000203
11000.0	680.0	3.8	35.6	853.6	649.0	260.5	18.0	1.000204
11500.0	667.4	2.8	36.6	841.5	647.6	259.2	19.6	1.000201
12000.0	655.0	1.6	37.6	829.1	646.3	257.7	20.7	1.000198
12500.0	642.6	.3	38.9	817.5	644.7	256.5	21.3	1.000194
13000.0	630.3	-1.2	40.4	805.2	642.9	255.4	21.6	1.000191
13500.0	618.3	-2.6	41.9	793.1	641.2	254.1	22.0	1.000188
14000.0	606.5	-4.1	43.4	784.2	639.5	252.0	22.6	1.000185
14500.0	594.9	-5.5	44.9	775.4	637.7	251.1	24.0	1.000182
15000.0	583.5	-7.0	46.4	762.0	636.0	249.4	25.7	1.000179
15500.0	572.4	-8.4	47.9	752.4	634.2	247.4	26.6	1.000176
16000.0	561.4	-9.7	48.4	741.6	632.6	245.9	31.5	1.000173
16500.0	550.4	-10.4	50.0	729.5	631.7	245.7	32.5	1.000168
17000.0	539.6	-11.5	51.4	716.0	630.4	247.7	33.3	1.000164
17500.0	529.0	-12.6	53.7	707.0	628.9	250.0	32.1	1.000161
18000.0	518.5	-13.9	55.1	696.4	627.4	252.0	31.2	1.000158
18500.0	508.2	-15.2	56.5	686.0	625.8	252.0	31.5	1.000155
19000.0	498.1	-16.4	58.0	675.6	624.3	251.7	31.2	1.000153
19500.0	488.0	-17.4	59.1	664.6	623.1	250.1	31.0	1.000150
20000.0	478.1	-18.5	60.7	653.7	621.6	247.9	30.9	1.000148
20500.0	468.4	-19.5	62.6	642.1	620.6	244.5	31.2	1.000145
21000.0	458.9	-20.5	63.4	632.0	619.3	241.4	32.1	1.000143
21500.0	449.6	-21.5	64.9	622.4	618.0	239.7	33.6	1.000140
22000.0	440.3	-22.6	66.2	612.2	616.7	236.0	35.3	1.000138
22500.0	431.5	-23.6	68.0	602.0	615.5	232.0	36.8	1.000135
23000.0	422.6	-25.0	70.4	590.4	613.2	228.0	37.0	1.000133
23500.0	413.9	-24.8	72.0	580.5	614.0	229.0	36.8	1.000130

STATION ALTITUDE 4126.59 FEET MSL
8 MAY 62
ASCENSION NO. 133

UPPER AIR DATA
1280010133
HOLLOMAN
TABLE 11 Cont'd

GEODETIC COORDINATES
32.00805 LAT DEG
106.09965 LONG DEG

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND M/SEC	DIRECTION WINDS (10) DEGREES (10)	ANGLE DATA SPEED KNOTS	INDEX OF REFRACTION
4000.0	400.3	-25.8	-41.1	22.0	570.7	612.8	249.2	35.3	1.000128
4500.0	390.9	-26.8	-42.0	22.1	561.2	611.5	252.0	34.1	1.000126
5000.0	380.4	-28.0	-42.8	22.5	551.9	610.0	250.1	33.4	1.000124
5500.0	366.1	-29.2	-43.7	22.9	542.0	608.5	257.5	32.9	1.000122
6000.0	372.0	-30.4	-44.6	23.3	533.9	607.0	257.9	32.4	1.000120
6500.0	364.1	-31.6	-45.5	23.7	525.1	605.5	255.2	31.9	1.000118
7000.0	350.3	-32.8	-46.4	24.1	516.5	603.9	252.0	31.6	1.000116
7500.0	340.7	-34.0	-47.3	24.5	508.0	602.4	251.0	32.4	1.000114
8000.0	341.3	-35.2	-48.2	24.9	499.7	600.9	251.7	33.1	1.000112
8500.0	334.0	-36.4	-49.1	25.3	491.5	599.4	253.1	33.7	1.000110
9000.0	320.9	-37.6	-50.0	25.7	483.5	597.9	253.9	33.4	1.000108
9500.0	319.9	-38.7	-51.0	23.7*	475.5	596.5	253.9	31.8	1.000106
10000.0	312.8	-39.5	-51.9	15.5**	460.4	595.5	253.9	30.6	1.000104
10500.0	300.0	-40.3	-52.4	7.3**	457.7	594.5	253.0	30.2	1.000102
11000.0	299.2	-41.1			449.5	593.4	253.7	30.3	1.000100
11500.0	292.5	-42.4			441.5	591.8	253.0	31.2	1.000098
12000.0	285.9	-43.6			433.6	590.3	254.0	31.6	1.000097
12500.0	279.4	-44.8			426.3	588.7	254.3	31.7	1.000095
13000.0	273.1	-46.0			419.0	587.1	254.4	32.1	1.000093
13500.0	267.0	-47.3			411.7	585.5	254.5	32.5	1.000092
14000.0	260.9	-48.5			404.6	583.9	250.2	33.0	1.000090
14500.0	255.1	-49.7			397.7	582.3	257.5	33.5	1.000089
15000.0	249.3	-50.9			390.6	580.7	250.0	34.2	1.000087
15500.0	243.4	-52.1			383.5	579.3	253.3	35.5	1.000085
16000.0	237.0	-53.2			376.4	577.8	253.3	37.6	1.000084
16500.0	232.0	-54.3			369.4	576.3	251.4	38.1	1.000082
17000.0	226.6	-55.5			362.0	574.8	249.4	37.7	1.000081
17500.0	221.2	-56.6			355.9	573.3	247.7	36.4	1.000079
18000.0	210.9	-57.7			349.3	571.8	240.1	34.8	1.000078
18500.0	210.9	-58.9			342.9	570.3	240.7	33.8	1.000076
19000.0	203.9	-60.0			336.0	568.8	247.0	32.9	1.000075
19500.0	201.1	-61.1			330.4	567.2	240.4	34.1	1.000074
20000.0	195.2	-61.7			323.2	565.5	240.9	35.8	1.000072
20500.0	191.5	-62.1			316.0	564.0	243.0	40.5	1.000070
21000.0	186.8	-63.4			310.3	562.2	249.1	45.7	1.000069
21500.0	182.3	-63.1			302.4	560.6	243.3	50.3	1.000067
22000.0	177.4	-62.8			294.5	559.1	249.5	54.7	1.000066
22500.0	173.5	-62.4			286.9	557.5	249.7	58.1	1.000064
23000.0	169.3	-63.0			280.0	556.0	243.0	60.5	1.000062
23500.0	165.2	-63.5			274.3	554.1	249.5	61.5	1.000061

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
8 MAY 82 0630 MDT
ASCENSION NO. 133

UPPER AIR DATA
128000HRS
HOLLOMAN

TABLE II Cont'd

GEODETIC COORDINATES
32.0880°S LAT DEG
106.0990°S LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DIRECTION (TWD)	WIND SPEED KNOTS	INDEX OF REFRACTION
40000.0	161.1	-63.3		267.5	504.4	299.7	60.6	1.000000
40500.0	157.2	-63.0		260.7	504.7	249.7	59.6	1.000038
45000.0	153.4	-62.8		254.1	505.0	249.0	58.3	1.000057
45500.0	149.7	-62.7		247.7	505.2	250.0	57.7	1.000055
46000.0	146.0	-63.2		242.3	504.4	250.1	57.9	1.000054
46500.0	142.5	-63.0		236.2	504.7	250.4	58.0	1.000053
47000.0	139.0	-62.7		230.1	505.1	250.9	58.1	1.000051
47500.0	135.6	-61.9		223.0	505.3	251.9	57.5	1.000050
48000.0	132.4	-60.5		216.0	506.1	253.3	56.1	1.000048
48500.0	129.2	-59.2		210.3	509.0	253.9	54.2	1.000047
49000.0	126.1	-59.1		205.2	570.0	253.4	51.6	1.000046
49500.0	123.1	-59.6		200.7	509.4	252.5	49.2	1.000045
50000.0	120.1	-60.1		196.3	506.7	251.0	46.9	1.000044
50500.0	117.2	-60.6		192.1	508.0	250.2	45.1	1.000043
51000.0	114.4	-61.1		187.9	567.3	250.2	43.6	1.000042
51500.0	111.6	-61.6		183.6	500.7	251.3	42.7	1.000041
52000.0	108.9	-62.1		179.0	506.0	253.3	42.3	1.000040
52500.0	106.3	-62.6		174.9	505.3	253.9	40.9	1.000039
53000.0	103.7	-62.6		171.0	565.3	259.5	36.4	1.000038
53500.0	101.2	-61.7		166.0	500.5	262.4	35.5	1.000037
54000.0	98.8	-61.5		162.0	500.8	262.9	31.1	1.000036
54500.0	96.4	-61.9		158.9	500.2	263.5	27.1	1.000035
55000.0	94.0	-62.3		155.3	505.7	263.1	25.0	1.000035
55500.0	91.7	-62.7		151.0	505.2	262.7	23.0	1.000034
56000.0	89.5	-63.1		148.4	504.7	261.5	21.8	1.000033
56500.0	87.3	-63.5		145.1	504.1	260.2	20.7	1.000032
57000.0	85.2	-63.9		141.0	503.0	261.3	20.2	1.000032
57500.0	83.1	-64.2		136.0	503.1	263.7	20.0	1.000031
58000.0	81.1	-64.6		133.3	502.5	267.9	20.9	1.000030
58500.0	79.1	-65.0		132.4	502.0	273.0	23.2	1.000029
59000.0	77.2	-64.0		126.0	503.4	270.0	24.5	1.000029
59500.0	75.3	-62.7		124.7	505.1	260.3	20.4	1.000028
60000.0	73.5	-61.5		121.0	500.8	255.7	16.8	1.000027
60500.0	71.7	-60.2		117.4	506.5	240.3	15.0	1.000026
61000.0	70.0	-58.9		113.0	570.2	170.1	17.5	1.000025
61500.0	68.3	-59.7		111.5	569.2	194.4	16.5	1.000025
62000.0	66.7	-60.5		109.2	503.1	192.9	19.2	1.000024
62500.0	65.1	-61.3		107.0	567.0	197.4	17.8	1.000024
63000.0	63.5	-62.1		104.6	505.4	203.3	15.9	1.000023
63500.0	62.0	-62.3		102.4	505.7	217.0	15.4	1.000023

GEODETIC COORDINATES
32.00805 LAT DEG
106.09905 LONG DEG

UPPER AIR DATA
1280010133
HOLLUMAY
TABLE 11 Cont'd

STATION ALTITUDE 4126.59 FEET MSL
8 MAY 62
ASCENSION NO. 133 0630 MDT

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA (DIRECTION IN DEGREES TRUE)	WIND SPEED KNOTS	INDEX OF REFRACTION
04000.0	60.5	-61.9		99.0	500.2	251.7	16.6	1.000072
04500.0	59.0	-61.6		97.2	506.7	240.2	17.6	1.000022
05000.0	57.6	-61.2		94.7	507.2	242.5	17.0	1.000021
05500.0	50.2	-60.8		92.2	507.7	243.4	15.9	1.000021
06000.0	50.9	-58.5		89.1	570.7	232.7	11.3	1.000020
06500.0	53.6	-56.4		86.1	573.5	209.0	7.6	1.000019
07000.0	52.3	-56.3		84.0	573.7	190.5	8.2	1.000019
07500.0	51.1	-50.1		82.0	573.9	177.7	9.8	1.000018
08000.0	49.0	-53.9		80.0	574.2	175.2	10.8	1.000018
08500.0	40.7	-53.0		77.0	575.4	177.2	11.2	1.000017
09000.0	47.6	-54.1		75.0	576.0	170.2	11.5	1.000017
09500.0	46.5	-54.1		73.9	576.6	160.5	6.9	1.000016
10000.0	43.4	-54.5		72.5	576.1	132.7	7.6	1.000016
10500.0	40.3	-54.9		70.7	575.5	115.4	7.2	1.000016
11000.0	43.3	-53.3		69.2	575.0	110.9	5.9	1.000015
11500.0	42.3	-53.4		67.0	574.9	104.0	4.7	1.000015
12000.0	41.3	-54.8		65.9	575.0	113.3	2.1	1.000015
12500.0	40.3	-54.2		64.2	576.4	204.5	1.2	1.000014
13000.0	39.4	-53.6		62.5	577.2	202.5	2.8	1.000014
13500.0	38.5	-53.1		60.9	576.0	272.0	2.8	1.000014
14000.0	37.6	-52.5		59.5	576.7	263.2	2.8	1.000013
14500.0	36.7	-52.4		57.9	576.8	274.0	4.2	1.000013
15000.0	35.8	-52.4		50.0	576.8	200.0	6.1	1.000013
15500.0	35.0	-52.3		53.5	578.9	263.1	8.0	1.000012
16000.0	34.2	-52.3		54.0	579.0	264.5	7.1	1.000012
16500.0	33.4	-52.2		52.7	579.0	260.4	6.0	1.000012
17000.0	32.6	-52.2		51.5	579.1	260.5	5.2	1.000011
17500.0	31.9	-52.1		50.5	579.2	263.1	7.2	1.000011
18000.0	31.2	-52.1		49.1	579.2	260.1	9.2	1.000011
18500.0	30.4	-52.0		48.0	579.5	269.9	10.2	1.000011
19000.0	29.7	-51.7		46.8	579.8	267.6	8.1	1.000010
19500.0	29.1	-50.8		45.5	580.9	273.9	6.2	1.000010
20000.0	28.4	-50.0		44.5	582.0	293.9	5.6	1.000010
20500.0	27.7	-49.1		43.1	583.1	302.0	6.5	1.000010
21000.0	27.1	-48.4		42.0	584.1	303.1	7.4	1.000009
21500.0	26.5	-48.1		41.0	584.4	302.4	7.9	1.000009
22000.0	25.8	-47.8		40.0	584.8	30.1	10.5	1.000009
22500.0	25.3	-47.6		39.1	585.1	21.5	15.1	1.000009
23000.0	24.7	-47.3		38.2	585.5	23.7	17.7	1.000008
23500.0	24.2	-47.0		37.5	585.8	20.2	18.6	1.000008

STATION ALTITUDE 12600 FT MSL
 MAY 22 0630 MDT
 ASCENSION NO. 133

UPPER AIR DATA
 1200101000
 HOLLAND

STATION ALTITUDE 12600 FT MSL
 MAY 22 0630 MDT
 ASCENSION NO. 133

TABLE 11 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY G/M ³ OR MLTGP	SPEED OF SOUND KIPTS	WIND DIRECTION (IN) KNOTS	WIND SPEED KNOTS	INDEX OF REFRACTION
04000.0	23.6	-40.8		30.4	580.2	0.0	19.6	1.000008
04500.0	23.1	-40.5		30.5	580.5	9.4	15.1	1.000008
05000.0	22.6	-40.2		34.7	580.9	35.9	13.2	1.000008
05500.0	22.1	-40.0		33.9	581.2	201.0	21.2	1.000008
06000.0	21.6	-45.7		33.1	581.5	270.4	20.5	1.000007
06500.0	21.1	-45.4		32.3	581.9	200.5	31.6	1.000007
07000.0	20.6	-45.2		31.5	582.2	200.4	34.9	1.000007
07500.0	20.2	-44.9		30.6	582.6	201.2	30.4	1.000007
08000.0	19.7	-44.7		30.1	582.8	200.0	34.9	1.000007
08500.0	19.3	-44.6		29.4	582.9	200.7	33.3	1.000007
09000.0	18.8	-44.5		28.7	583.1	200.0	31.1	1.000006
09500.0	18.4	-44.4		28.1	583.2	200.4	26.5	1.000006
10000.0	18.0	-44.3		27.4	583.3	200.9	22.0	1.000006
10500.0	17.6	-44.2		26.6	583.5	200.5	17.9	1.000006
11000.0	17.2	-44.1		26.2	583.7	200.2	16.8	1.000006
11500.0	16.8	-44.0		25.6	583.7	200.2	16.2	1.000006
12000.0	16.5	-43.9		25.0	583.8	201.5	16.3	1.000006
12500.0	16.1	-43.8		24.5	583.9	200.7	17.7	1.000005
13000.0	15.7	-43.7		23.9	584.1	200.7	19.2	1.000005
13500.0	15.4	-43.6		23.4	584.2	200.0	20.7	1.000005
14000.0	15.0	-43.5		22.8	584.4	202.1	21.5	1.000005
14500.0	14.7	-43.4		22.3	584.5	200.5	22.3	1.000005
15000.0	14.4	-43.3		21.6	584.6	200.1	23.2	1.000005
15500.0	14.1	-43.2		21.2	584.6	202.2	23.2	1.000005
16000.0	13.8	-43.1		20.8	584.9	200.6	23.0	1.000005
16500.0	13.5	-42.8		20.3	584.9	200.4	22.8	1.000005
17000.0	13.2	-42.5		19.9	584.6	200.0	22.2	1.000004
17500.0	12.9	-42.3		19.4	584.9	200.5	21.1	1.000004
18000.0	12.6	-42.0		19.0	584.5	200.9	19.9	1.000004
18500.0	12.3	-41.8		18.5	584.6	200.4	18.9	1.000004
19000.0	12.0	-41.5		18.1	584.6	200.5	16.1	1.000004
19500.0	11.7	-41.2		17.7	584.5	200.4	17.4	1.000004
20000.0	11.5	-41.0		17.3	584.6	200.4	17.6	1.000004
20500.0	11.3	-40.7		16.9	584.6	200.2	22.4	1.000004
21000.0	11.0	-40.4		16.5	584.6	200.5	27.3	1.000004
21500.0	10.8	-40.2		16.1	584.6	200.0	32.3	1.000004
22000.0	10.5	-39.9		15.7	584.6	200.0	32.3	1.000004
22500.0	10.3	-39.7		15.4	584.6	200.0	32.3	1.000004
23000.0	10.1	-39.4		15.0	584.6	200.0	32.3	1.000004
23500.0	9.9	-39.4		14.7	584.6	200.0	32.3	1.000004

STATION ALTITUDE 4126.50 FEET MSL	U, P, R AIR DATA	GEODETIC COORDINATES
8 MAY 02	1230010155	32.00005 LAT DEG
ASCENSION NO. 155	10000000	106.00005 LONG DEG
0630 PDT		

TABLE 11 Cont'd

GEODETIC ALTITUDE	PRESSURE	TEMPERATURE AIR	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED (KNOTS)	INDEX OF REFRACTION
104000.0	9.6	-39.6		14.4	595.4		1.000003
104500.0	9.4	-39.7		14.1	595.2		1.000003
105000.0	9.2	-39.9		13.8	595.0		1.000003

STATION ALTITUDE 9126.59 FEET MSL
 8 MAY 62 0630 MDT
 ASCENSION IS. 133

ON BOARD CLOCKS
 1730010103
 06000000

GEODETIC COORDINATES
 22-000065 LAT DEG
 106-09095 LONG DEG

TABLE 12

PRESSURE GEOPOTENTIAL		TEMPERATURE		RELATION PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	TEMPERATURE DEGREES CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
856.0	4078.	17.9	-2.4	25.	189.4	0.0
800.0	6571.	15.2	-3.9	20.	210.9	0.0
750.0	8349.	10.6	-6.2	30.	247.0	0.0
700.0	10217.	5.7	-8.9	34.	261.7	12.2
650.0	12190.	1.2	-11.5	35.	257.2	21.1
600.0	14279.	-4.0	-15.1	44.	251.0	23.5
550.0	16499.	-10.4	-22.7	50.	240.0	30.7
500.0	18881.	-16.2	-32.0	24.	252.0	31.5
450.0	21456.	-21.5	-30.9	23.	230.0	30.7
400.0	24277.	-26.4	-41.0	22.	251.0	34.5
350.0	27596.	-33.8	-47.1	24.	251.9	34.5
300.0	30883.	-41.0			253.7	30.2
250.0	34865.	-50.8			250.7	34.1
200.0	39519.	-61.4			240.0	34.4
175.0	42222.	-62.5			249.0	37.2
150.0	45535.	-62.6			249.9	37.7
125.0	49042.	-59.2			253.0	50.8
100.0	53560.	-61.3			202.0	50.5
85.0	58000.	-64.0			271.1	25.0
70.0	60706.	-58.0			199.4	17.2
60.0	63936.	-61.8			230.9	16.1
50.0	67004.	-56.0			174.0	10.7
40.0	72377.	-54.0			247.4	1.0
30.0	78478.	-52.0			203.4	1.1
25.0	82403.	-47.4			25.0	17.1
20.0	87271.	-44.8			200.9	30.0
15.0	93003.	-43.5			294.0	21.0
10.0	102024.	-39.3				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 82 0630 MDT
 ASCENSION NO. 35

SIGNIFICANT LEVEL DATA
 1280030000
 JALLEN
 TABLE 13

WLODELIC COORDINATES
 33.16712 LAT DEG
 106.49511 LONG DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	AIR TEMPERATURE DEGREES	WIND DIRECTION CENTIGRADE	REL. HUM. PERCENT
876.4	4051.0	3.0	-8.0	44.0
874.4	4112.5	9.2	-3.0	42.0
870.4	4238.0	12.5	-7	40.0
850.0	4895.2	16.0	-1.1	31.0
844.4	5080.0	17.4	.1	31.0
781.8	7225.1	13.8	-3.0	31.0
700.0	10240.6	5.9	-9.1	33.0
658.8	11868.1	1.7	-11.7	36.0
595.8	14465.1	-6.1	-16.3	44.0
500.0	18904.1	-17.0	-30.4	50.0
445.4	21731.5	-21.8	-35.7	27.0
434.7	22319.5	-22.6	-36.6	26.0
400.0	24310.3	-27.1	-40.3	27.0
330.3	28746.3	-38.5	-49.2	31.0

STATION ALTITUDE 4051.00 FEET MSL
8 MAY 62 0630 MDT
ASCENSION NO. 35

UPPER AIR DATA
1200500Z
JALLEN
TABLE 14

GEOMETRIC COORDINATES
0546712 LAT 466
100.49511 LONG 160

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	TEMPERATURE DEWPOINT CELSIUS	REL. HUM. PERCENT	HEIGHT CM/CURVE METER	WIND DIRECTION KNOTS	WIND SPEED KNOTS	INDEX OF REFRACTION
4051.0	876.4	3.0	-8.0	44.0	1104.0	047.9	2.9	1.000203
4500.0	862.2	13.9	-8	36.4	1043.7	060.9	2.1	1.000209
5000.0	840.8	16.8	-4	31.0	1014.0	064.2	3.6	1.000233
5500.0	831.8	16.7	-5	31.0	997.0	064.1	5.9	1.000249
6000.0	817.0	15.9	-1.2	31.0	982.2	065.1	8.0	1.000244
6500.0	802.4	15.0	-2.0	31.0	967.0	062.2	9.6	1.000240
7000.0	780.1	14.2	-2.7	31.0	953.3	061.2	9.8	1.000235
7500.0	774.0	13.1	-3.6	31.2	934.6	059.9	9.5	1.000231
8000.0	759.9	11.8	-4.6	31.5	927.1	058.5	10.2	1.000227
8500.0	740.1	10.5	-5.6	31.8	914.0	058.7	11.2	1.000223
9000.0	732.6	9.2	-6.6	32.2	902.5	059.2	12.2	1.000219
9500.0	719.3	7.8	-7.6	32.5	890.1	055.0	13.3	1.000215
10000.0	700.2	6.5	-8.6	32.8	870.1	052.1	14.5	1.000211
10500.0	693.2	5.2	-9.5	33.5	860.1	050.5	16.2	1.000207
11000.0	680.4	3.9	-10.3	34.4	854.1	049.0	18.6	1.000204
11500.0	667.7	2.6	-11.1	35.3	842.2	047.5	20.0	1.000201
12000.0	655.3	1.3	-12.0	36.4	830.6	045.9	21.0	1.000197
12500.0	642.9	-0.2	-12.8	37.0	819.3	044.1	21.3	1.000194
13000.0	630.7	-1.7	-13.6	39.5	808.5	042.5	21.5	1.000191
13500.0	618.7	-3.2	-14.5	41.0	797.4	040.5	21.5	1.000188
14000.0	607.0	-4.7	-15.4	42.5	786.0	038.7	20.7	1.000185
14500.0	595.4	-6.1	-16.4	44.0	776.0	036.9	19.1	1.000182
15000.0	583.8	-7.4	-17.9	42.4	764.4	035.4	17.9	1.000178
15500.0	572.3	-8.6	-19.5	40.8	753.0	033.9	17.6	1.000175
16000.0	561.1	-9.8	-21.1	39.2	741.7	032.4	17.9	1.000171
16500.0	550.0	-11.1	-22.7	37.6	730.0	030.9	19.6	1.000168
17000.0	539.2	-12.3	-24.2	36.0	719.7	029.4	21.5	1.000165
17500.0	528.6	-13.5	-25.8	34.4	709.0	027.9	22.8	1.000162
18000.0	518.3	-14.8	-27.5	32.9	698.4	026.4	24.1	1.000159
18500.0	508.1	-16.0	-29.1	31.3	688.0	024.8	25.0	1.000156
19000.0	498.0	-17.2	-30.6	29.9	677.5	023.4	26.1	1.000154
19500.0	488.0	-18.0	-31.5	29.4	666.0	022.4	28.3	1.000151
20000.0	478.1	-18.9	-32.4	28.8	654.6	021.3	30.6	1.000148
20500.0	468.4	-19.7	-33.4	28.3	643.7	020.3	32.6	1.000146
21000.0	458.9	-20.6	-34.3	27.8	632.1	019.2	33.9	1.000143
21500.0	449.6	-21.4	-35.2	27.2	622.1	018.2	34.4	1.000140
22000.0	440.5	-22.2	-36.2	26.5	611.2	017.3	33.7	1.000138
22500.0	431.4	-23.0	-37.1	26.1	600.7	016.2	32.7	1.000135
23000.0	422.5	-24.1	-38.0	26.3	591.0	014.8	32.9	1.000133
23500.0	413.8	-25.3	-39.9	26.6	581.4	013.4	33.2	1.000131

STATION ALTITUDE 4051.00 FEET MSL				UPLER AIR DATA				GEODETIC COORDINATES			
R DAY 02				1200030000				33.10/12 LAT DEG			
ASCENSION NO. 35				JALLEN				106.49511 LONG DEG			
0630 MDT				TABLE 14 Cont'd							
GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION		
		AIR DEGREES	DEWPOINT CENTIGRADE				VELOCITY METERS/SEC	SPEED KNOTS			
24000.0	400.2	-20.4	-39.8	26.8	572.0	612.0	240.0	33.5	1.000129		
24500.0	390.7	-27.6	-40.7	27.2	562.7	610.5	240.7	33.8	1.000126		
25000.0	380.3	-28.9	-41.7	27.6	553.0	608.9	240.0	33.2	1.000124		
25500.0	360.0	-30.2	-42.7	28.1	544.7	607.5	250.0	32.6	1.000122		
26000.0	371.9	-31.4	-43.6	28.5	535.9	605.7	250.7	32.2	1.000120		
26500.0	360.9	-32.7	-44.6	29.0	527.5	604.1	250.4	31.9	1.000118		
27000.0	350.2	-34.0	-45.6	29.4	518.0	602.5	249.2	33.3	1.000116		
27500.0	340.6	-35.3	-46.7	29.9	510.5	600.9			1.000114		
28000.0	341.1	-36.6	-47.7	30.3	502.5	599.2			1.000112		
28500.0	330.8	-37.9	-48.7	30.8	494.2	597.0			1.000111		

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 52 0630 MDT
 ASCENSION NO. 35

MAJORITY LEVELS
 1280030000
 JALLIN

GEODETIC COORDINATES
 33.16712 LAT DEG
 106.49511 LONG DEG

TABLE 15

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4892.	16.0	-1.1	31.	257.0	3.1
800.0	6582.	14.9	-2.1	31.	231.2	9.9
750.0	8361.	10.8	-5.3	32.	253.2	10.9
700.0	10231.	5.9	-9.1	33.	250.7	15.1
650.0	12203.	.7	-12.3	37.	250.4	21.1
600.0	14288.	-5.6	-16.0	43.	250.0	17.7
550.0	16504.	-11.1	-22.7	36.	251.9	19.8
500.0	18879.	-17.0	-30.4	30.	250.7	23.8
450.0	21451.	-21.4	-35.2	27.	238.0	34.4
400.0	24272.	-27.1	-40.3	27.	240.4	33.7
350.0	27378.	-35.1	-46.5	30.	240.3	34.6

STATION ALTITUDE 4051.37 FEET MSL
 8 MAY 62 0800 MDT
 ASCENSION IS. 44

SIGNIFICANT LEVEL DATA
 1280160044
 LC-37

GEOGRAPHIC COORDINATES
 32-40175 LAT DEG
 106-31252 LONG DEG

TABLE 16

PRESSURE MILLIBARS	GEOGRAPHIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
877.5	4051.4	9.8	7.4	85.0
866.6	4414.7	14.8	-6.1	23.0
850.0	4935.3	18.4	-5.6	19.0
816.0	6288.2	17.8	-6.8	18.0
700.0	10306.5	7.3	-13.0	22.0
548.0	12714.4	-10.4	-19.0	49.0
515.4	13257.6	-13.7	-22.2	19.0
500.0	19013.5	-15.3	-24.2	10.0
460.0	24437.7	-26.5	-42.1	19.0
362.0	26766.4	-31.6	-47.4	19.0
342.2	28009.0	-34.3	-49.7	19.0
323.2	29395.1	-37.7	-52.2	20.0
300.0	31074.8	-40.9		
250.0	35030.8	-49.8		
215.2	38258.9	-57.0		
200.0	39781.6	-58.5		
173.2	42736.9	-62.2		
150.0	45670.9	-61.5		
136.4	47608.6	-62.6		
129.0	48751.7	-59.4		
100.0	54022.1	-60.1		
82.0	58102.6	-58.7		
70.0	61352.3	-62.8		
50.0	68323.4	-55.2		
37.0	74736.3	-51.1		
33.6	76806.8	-51.6		
30.0	79245.0	-50.5		
21.7	86326.3	-44.6		
20.0	88133.2	-44.8		
13.2	97913.9	-41.0		
10.6	102304.9	-38.4		

STATION ALTITUDE 4051.47 FEET MSL
 DAY 22
 ASCENSION NO. 44 0800 MDT

UPPER AIR DATA
 129010044
 10-37

GEOLOGIC COORDINATES
 22.40175 LAT DEG
 100.51232 LONG DEG

TABLE 17

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND METERS PER SECOND	WIND DIRECTION DEGREES (T)	WIND SPEED KNOTS	INDEX OF REFRACTION
4051.4	877.5	9.8	85.0	1075.0	350.8	0.0	0.0	1.000280
4500.0	863.4	15.4	22.5	1040.0	362.5	201.2	5.1	1.000250
5000.0	840.0	18.4	19.0	1011.0	369.8	201.2	6.5	1.000243
5500.0	835.1	18.1	18.6	994.5	369.5	201.2	9.9	1.000239
6000.0	810.4	17.9	18.2	977.7	369.2	201.0	12.7	1.000235
6500.0	805.8	17.2	18.2	962.0	364.4	205.4	12.8	1.000231
7000.0	789.3	15.9	18.7	949.0	362.9	207.1	13.1	1.000227
7500.0	775.1	14.6	19.2	930.0	361.4	212.9	14.0	1.000223
8000.0	761.2	13.3	19.7	924.2	359.9	210.6	14.5	1.000220
8500.0	747.5	12.0	20.2	911.0	350.4	220.7	14.7	1.000216
9000.0	734.0	10.7	20.7	899.0	350.0	220.7	15.0	1.000213
9500.0	720.6	9.4	21.2	887.5	350.5	219.5	15.2	1.000210
10000.0	707.8	8.1	21.7	875.7	350.8	220.2	15.4	1.000206
10500.0	694.0	6.8	22.8	865.7	352.2	221.5	15.7	1.000203
11000.0	681.7	5.4	24.0	851.0	350.0	224.2	16.4	1.000201
11500.0	668.6	4.0	27.0	839.0	349.0	227.0	17.1	1.000198
12000.0	650.1	2.6	29.1	827.0	347.5	230.4	17.5	1.000195
12500.0	645.7	1.2	31.2	816.5	345.7	233.5	17.9	1.000192
13000.0	631.6	-0.1	33.3	804.9	344.1	230.0	18.5	1.000190
13500.0	619.6	-1.5	35.5	795.7	342.4	230.0	18.5	1.000187
14000.0	607.9	-2.9	37.6	782.7	340.0	230.4	18.4	1.000184
14500.0	596.4	-4.3	39.7	771.9	339.2	234.4	20.2	1.000181
15000.0	585.1	-5.7	41.8	761.2	337.5	232.0	22.1	1.000178
15500.0	574.0	-7.0	43.9	750.7	335.8	231.5	23.9	1.000176
16000.0	563.2	-8.4	46.0	740.4	334.2	231.1	25.7	1.000173
16500.0	552.5	-9.8	48.1	730.2	332.5	231.4	26.9	1.000170
17000.0	541.8	-11.0	43.4	719.5	331.0	230.2	27.5	1.000167
17500.0	531.2	-12.1	53.7	709.5	329.0	244.2	28.6	1.000162
18000.0	520.7	-13.1	44.0	697.4	326.5	249.5	29.8	1.000158
18500.0	510.4	-14.2	46.7	686.5	327.0	255.5	24.9	1.000155
19000.0	500.5	-15.3	48.0	675.6	325.7	255.5	26.5	1.000152
19500.0	490.1	-16.3	48.1	664.0	324.4	251.0	29.0	1.000150
20000.0	480.1	-17.3	48.2	653.7	323.2	251.5	29.9	1.000147
20500.0	470.3	-18.4	48.3	643.0	321.9	252.7	30.1	1.000145
21000.0	460.8	-19.4	48.4	632.4	320.0	254.7	29.2	1.000142
21500.0	451.4	-20.4	48.5	622.1	319.4	254.2	28.6	1.000140
22000.0	442.2	-21.5	48.6	612.0	318.1	252.0	28.2	1.000138
22500.0	433.2	-22.5	48.6	602.0	316.6	251.1	24.2	1.000135
23000.0	424.4	-23.5	48.7	592.2	315.0	250.1	30.4	1.000133
23500.0	415.7	-24.6	48.8	582.5	314.5	250.0	31.4	1.000131

STATION ALTITUDE 1001.37 FEET MSL
 8 MAY 62 0800 MDT
 ASCENSION NO. 44

UPPER AIR DATA
 1230130044
 LC-37

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.31232 LON DEG

TABLE 17 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	TEMPERATURE DEWPOINT DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND M/SEC	WIND DATA DIRECTION (10) SPEED (10) KNOTS	INDEX OF REFRACTION
24000.0	407.3	-25.6	-42.4	18.9	573.0	613.0	251.1	1.000129
24500.0	390.9	-26.6	-43.2	19.0	563.7	611.7	251.3	1.000126
25000.0	390.6	-27.7	-44.1	19.0	554.3	610.4	251.5	1.000124
25500.0	382.3	-28.8	-45.1	19.0	545.1	609.0	251.7	1.000122
26000.0	374.3	-29.9	-46.0	19.0	536.0	607.6	250.0	1.000120
26500.0	366.4	-31.0	-46.9	19.0	527.1	606.3	249.1	1.000118
27000.0	358.7	-32.0	-47.8	19.0	518.2	604.9	248.0	1.000116
27500.0	351.0	-33.1	-48.7	19.0	509.3	603.6	248.0	1.000114
28000.0	343.5	-34.1	-49.6	19.0	500.6	602.3	248.1	1.000112
28500.0	336.1	-35.4	-50.5	19.3	492.4	600.8	248.5	1.000110
29000.0	328.7	-36.7	-51.5	19.7	484.4	599.1	248.0	1.000108
29500.0	321.7	-37.9	-52.9	18.8**	476.4	597.3	245.4	1.000106
30000.0	314.6	-38.9	-56.8	12.8**	467.8	596.3	244.9	1.000104
30500.0	307.7	-39.8	-62.4	6.8**	459.4	595.1	244.3	1.000102
31000.0	301.6	-40.8	-77.0	.9**	451.2	593.9	243.0	1.000101
31500.0	294.3	-41.8			443.2	592.5	244.1	1.000099
32000.0	287.6	-43.0			435.3	591.1	243.2	1.000097
32500.0	281.2	-44.1			427.6	589.6	243.1	1.000095
33000.0	274.8	-45.2			420.0	588.2	243.1	1.000094
33500.0	268.6	-46.3			412.5	586.8	243.0	1.000092
34000.0	262.6	-47.4			405.2	585.3	243.0	1.000090
34500.0	256.7	-48.5			398.1	583.9	247.0	1.000089
35000.0	250.9	-49.6			391.1	582.5	247.1	1.000087
35500.0	245.1	-50.7			383.9	581.0	247.9	1.000086
36000.0	239.4	-51.9			376.9	579.5	247.9	1.000084
36500.0	233.8	-53.0			370.0	578.0	248.1	1.000082
37000.0	228.4	-54.1			363.3	576.5	247.5	1.000081
37500.0	223.0	-55.3			356.6	575.0	243.7	1.000079
38000.0	217.8	-56.4			350.1	573.5	241.0	1.000078
38500.0	212.7	-57.2			343.2	572.4	241.5	1.000076
39000.0	207.7	-57.7			335.8	571.6	243.0	1.000075
39500.0	202.7	-58.2			328.6	571.1	240.7	1.000073
40000.0	197.4	-58.8			321.6	570.4	247.9	1.000072
40500.0	193.1	-59.4			314.6	569.6	240.1	1.000070
41000.0	188.5	-60.0			308.1	568.7	247.1	1.000069
41500.0	183.9	-60.7			301.6	567.9	250.0	1.000067
42000.0	179.5	-61.3			295.2	567.1	251.4	1.000066
42500.0	175.2	-61.9			288.9	566.2	251.6	1.000064
43000.0	171.0	-62.1			282.3	565.9	251.2	1.000063
43500.0	166.8	-62.0			275.3	565.1	250.0	1.000061

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4001.37 FEET MSL
8 MAY 62 0800 MDT
ASCENSION IS. 44

UPPER AIR DATA
1202100044
LC-17

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LONG DEG

TABLE 17 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TND)	SPEED KNOTS	
44000.0	162.8	-61.9		263.5	360.2	250.2	50.2	1.000060
44500.0	158.9	-61.8		261.0	360.4	249.9	50.9	1.000058
45000.0	155.0	-61.7		259.5	360.0	250.2	51.2	1.000057
45500.0	151.3	-61.5		249.0	360.7	250.0	51.6	1.000055
46000.0	147.6	-61.7		245.2	360.5	251.0	50.7	1.000054
46500.0	144.0	-62.0		237.0	360.1	251.4	49.7	1.000053
47000.0	140.5	-62.3		232.1	363.0	249.0	48.6	1.000052
47500.0	137.1	-62.5		226.0	363.4	247.0	47.5	1.000051
48000.0	133.8	-61.5		220.5	360.8	240.0	46.0	1.000049
48500.0	130.6	-60.1		215.5	360.0	240.0	48.7	1.000048
49000.0	127.5	-59.4		207.8	369.5	247.5	49.8	1.000046
49500.0	124.4	-59.5		202.0	369.4	249.4	50.9	1.000045
50000.0	121.4	-59.6		196.0	369.4	250.0	51.1	1.000044
50500.0	118.5	-59.6		193.4	369.3	252.1	51.3	1.000043
51000.0	115.7	-59.7		186.0	369.2	252.9	50.3	1.000042
51500.0	112.9	-59.8		184.3	369.1	253.7	49.7	1.000041
52000.0	110.2	-59.8		180.0	369.0	251.0	50.3	1.000040
52500.0	107.6	-59.9		175.7	368.9	253.5	50.6	1.000039
53000.0	105.0	-60.0		171.5	363.8	255.0	50.0	1.000038
53500.0	102.5	-60.0		167.5	360.7	250.4	47.4	1.000037
54000.0	100.0	-60.1		163.5	360.0	257.1	42.2	1.000036
54500.0	97.6	-59.9		159.5	360.9	250.2	37.3	1.000036
55000.0	95.3	-59.8		155.0	369.1	260.0	33.1	1.000035
55500.0	93.0	-59.6		151.7	369.3	262.2	29.1	1.000034
56000.0	90.8	-59.4		146.0	369.5	263.1	26.0	1.000033
56500.0	88.6	-59.2		144.3	369.6	264.0	26.9	1.000032
57000.0	86.5	-59.1		140.8	370.0	260.7	23.6	1.000031
57500.0	84.4	-58.9		137.3	370.2	270.0	20.0	1.000031
58000.0	82.4	-58.7		135.9	370.5	270.2	16.2	1.000030
58500.0	80.4	-59.2		131.0	369.8	271.4	12.6	1.000029
59000.0	78.5	-59.8		126.2	369.0	301.0	10.8	1.000029
59500.0	76.6	-60.5		125.5	363.2	300.0	9.8	1.000028
60000.0	74.8	-61.1		122.0	367.3	293.9	7.1	1.000027
60500.0	73.0	-61.7		120.2	360.5	255.5	5.8	1.000027
61000.0	71.2	-62.4		117.7	363.0	261.1	10.6	1.000026
61500.0	69.5	-62.6		115.0	363.2	263.5	17.3	1.000026
62000.0	67.8	-62.1		112.0	360.0	264.0	23.9	1.000025
62500.0	66.2	-61.5		109.0	360.7	265.5	25.9	1.000024
63000.0	64.6	-61.0		106.2	367.4	260.2	28.1	1.000024
63500.0	63.1	-60.5		103.4	360.2	264.0	27.9	1.000023

STATION ALTITUDE 4051.37 FEET MSL
8 MAY 62
ASCENSION 140. 44
0800 MDT

UPPER AIR DATA
1200100044
LC-37

GEOLYTIC COORDINATES
32.40175 LAT DEG
106.31232 LONG DEG

TABLE 17 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
04000.0	01.6	-59.9		100.0	560.9	220.4	1.0000022
04500.0	00.1	-59.4		90.0	569.0	23.7	1.0000022
05000.0	00.7	-58.8		93.4	570.3	18.4	1.0000021
05500.0	57.3	-58.3		92.9	571.1	13.2	1.0000021
06000.0	55.9	-57.7		90.5	571.0	11.6	1.0000020
06500.0	54.6	-57.2		86.1	572.3	10.7	1.0000020
67000.0	53.3	-56.6		85.0	573.2	11.7	1.0000019
67500.0	52.0	-56.1		83.3	574.0	13.0	1.0000019
68000.0	50.8	-55.6		81.3	574.7	15.1	1.0000018
68500.0	49.6	-55.1		79.2	575.3	14.3	1.0000018
69000.0	48.4	-54.8		77.3	575.7	13.5	1.0000017
69500.0	47.3	-54.4		75.4	576.1	9.4	1.0000017
70000.0	46.2	-54.1		73.3	576.0	4.2	1.0000016
70500.0	45.1	-53.8		71.7	577.0	2.0	1.0000016
71000.0	44.1	-53.5		69.9	577.4	1.0	1.0000016
71500.0	43.1	-53.2		68.2	577.8	1.3	1.0000015
72000.0	42.1	-52.8		66.3	578.2	1.8	1.0000015
72500.0	41.1	-52.5		64.9	578.7	4.0	1.0000014
73000.0	40.1	-52.2		63.3	579.1	2.3	1.0000014
73500.0	39.2	-51.9		61.7	579.5	1.7	1.0000014
74000.0	38.3	-51.6		60.2	579.4	2.3	1.0000013
74500.0	37.4	-51.3		58.7	580.3	2.5	1.0000013
75000.0	36.5	-51.2		57.4	580.4	2.4	1.0000013
75500.0	35.7	-51.3		56.1	580.3	2.6	1.0000012
76000.0	34.9	-51.4		54.8	580.1	4.8	1.0000012
76500.0	34.1	-51.5		53.0	580.0	5.6	1.0000012
77000.0	33.3	-51.5		52.3	580.0	6.4	1.0000012
77500.0	32.5	-51.3		51.1	580.3	7.0	1.0000011
78000.0	31.8	-51.1		49.9	580.0	7.3	1.0000011
78500.0	31.1	-50.8		48.7	580.9	7.5	1.0000011
79000.0	30.3	-50.6		47.5	581.2	6.8	1.0000011
79500.0	29.7	-50.3		46.4	581.0	6.4	1.0000010
80000.0	29.0	-49.9		45.2	582.1	6.9	1.0000010
80500.0	28.3	-49.5		44.1	582.7	7.9	1.0000010
81000.0	27.7	-49.0		43.0	583.2	9.2	1.0000010
81500.0	27.1	-48.6		42.0	583.6	11.3	1.0000009
82000.0	26.4	-48.2		41.0	583.3	13.5	1.0000009
82500.0	25.9	-47.8		40.0	584.0	15.8	1.0000009
83000.0	25.3	-47.4		39.0	583.4	18.1	1.0000009
83500.0	24.7	-47.0		38.0	583.9	20.1	1.0000008

STATION ALTITUDE 4051.37 FEET MSL
8 MAY 82 0800 MDT
ASLENSION NO. 44

IN PER AIR DATA
1200100044
LC-37

COORDINATE COORDINATES
32.90175 LAT DEG
100.31232 LONG DEG

TABLE 17 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
04000.0	24.1	-40.5		37.1	580.5	302.1	1.000008
04500.0	23.6	-40.1		36.2	587.0	303.1	1.000008
05000.0	23.1	-45.7		35.3	587.5	307.9	1.000008
05500.0	22.5	-45.3		34.5	586.1	311.2	1.000008
06000.0	22.0	-44.9		33.6	586.6	315.3	1.000007
06500.0	21.5	-44.6		32.8	585.9	312.1	1.000007
07000.0	21.0	-44.7		32.1	585.9	303.3	1.000007
07500.0	20.6	-44.7		31.4	586.0	260.9	1.000007
08000.0	20.1	-44.6		30.7	586.7	273.2	1.000007
08500.0	19.7	-44.6		30.0	585.9	257.4	1.000007
09000.0	19.2	-44.4		29.3	589.2	249.6	1.000007
09500.0	18.6	-44.2		28.6	589.4	257.2	1.000006
90000.0	18.4	-44.0		28.0	589.7	263.4	1.000006
90500.0	18.0	-43.8		27.3	589.9	269.8	1.000006
91000.0	17.6	-43.6		26.7	590.2	273.6	1.000006
91500.0	17.2	-43.4		26.1	590.5	280.3	1.000006
92000.0	16.8	-43.2		25.5	590.7	284.0	1.000006
92500.0	16.4	-43.0		24.9	591.0	289.2	1.000006
93000.0	16.1	-42.8		24.3	591.3	293.7	1.000005
93500.0	15.7	-42.6		23.8	591.5	296.1	1.000005
94000.0	15.4	-42.4		23.2	591.6	296.9	1.000005
94500.0	15.0	-42.2		22.7	592.1	300.3	1.000005
95000.0	14.7	-42.0		22.2	592.3	296.7	1.000005
95500.0	14.4	-41.8		21.7	592.6	293.4	1.000005
96000.0	14.1	-41.6		21.2	592.6	288.6	1.000005
96500.0	13.8	-41.4		20.7	593.1	283.3	1.000005
97000.0	13.4	-41.2		20.2	593.4	279.2	1.000004
97500.0	13.1	-41.0		19.7	593.6	276.6	1.000004
98000.0	12.9	-40.7		19.3	594.0	274.7	1.000004
98500.0	12.6	-40.4		18.6	594.3	273.6	1.000004
99000.0	12.3	-40.2		18.4	594.6	274.1	1.000004
99500.0	12.0	-39.9		18.0	595.0	276.3	1.000004
100000.0	11.8	-39.6		17.6	595.3	270.4	1.000004
100500.0	11.5	-39.4		17.2	595.6		1.000004
101000.0	11.3	-39.1		16.8	596.0		1.000004
101500.0	11.0	-38.9		16.4	596.3		1.000004
102000.0	10.8	-38.6		16.0	596.6		1.000004

STATION ALTITUDE 4051.47 FEET MSL
 8 MAY 62
 ASCENSION IS. 40 0800 MDT

LABORATORY LEVELS
 1280100044
 LC-37

GEOLATITIC COORDINATES
 32.40175 LAT DEG
 100.51232 LONG DEG

TABLE 18

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	WIND DATA	
				DIRECTION DEGREES (IN)	SPEED KNOTS
850.0	4932.	18.4	-5.0	201.2	0.0
800.0	6031.	16.9	-7.5	200.5	12.8
750.0	8410.	12.3	-9.9	220.2	14.7
700.0	10296.	7.3	-13.0	220.0	13.5
650.0	12277.	1.9	-15.7	232.2	17.8
600.0	14373.	-3.8	-15.7	234.0	19.8
550.0	16061.	-10.1	-18.9	235.1	27.2
500.0	18987.	-15.3	-34.2	253.5	20.6
450.0	21571.	-20.6	-38.4	253.9	20.5
400.0	24597.	-26.5	-43.1	251.5	32.5
350.0	27519.	-33.2	-48.8	245.5	37.1
300.0	31013.	-40.9		247.0	34.7
250.0	35004.	-49.8		247.0	47.4
200.0	39080.	-58.5		251.0	51.0
175.0	42419.	-61.0		250.7	51.4
150.0	45548.	-61.5		249.1	50.7
125.0	49261.	-59.5		257.1	42.5
100.0	53830.	-60.1		294.4	12.1
80.0	58420.	-59.3		202.9	14.9
70.0	61142.	-62.8		230.5	23.9
60.0	64284.	-59.3		189.7	14.0
50.0	68000.	-55.2		150.5	2.2
40.0	72773.	-52.2		265.0	0.0
30.0	78906.	-50.5		297.9	10.9
25.0	82830.	-47.2		270.4	7.7
20.0	87710.	-44.8		300.5	14.0
15.0	94068.	-42.2			

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 5989.00 FEET MSL
 8 MAY 62 0926 MDT
 ASCENSION NO. 199

SIGNIFICANT LEVEL DATA
 1200Z0199
 WHITE SANDS
 TABLE 19

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.57033 LONG DEG

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR	TEMPERATURE DEWPOINT	REL. HUM. PERCENT
MILLIBARS	FEET	DEGREES	CENTIGRADE	
676.8	5989.0	17.8	-0.5	29.0
850.0	4323.4	17.5	-1.2	28.0
940.9	5225.7	18.6	-0.7	27.0
815.4	6090.8	17.7	-1.5	27.0
700.0	10293.4	7.2	-8.4	32.0
627.2	15219.2	-0.8	-11.8	43.0
568.2	15777.4	-8.5	-18.8	51.0
560.2	16158.7	-9.3	-19.5	43.0
544.0	16883.4	-10.3	-28.9	20.0
500.0	18999.3	-15.2	-53.0	20.0
443.2	21960.5	-21.4	-37.6	21.0
400.0	24426.6	-25.9	-41.7	21.0
358.2	27026.9	-31.6	-45.4	24.0
325.2	29252.2	-37.1	-50.1	24.0
300.0	31073.6	-41.0		
293.4	31570.5	-41.5		
250.0	35080.7	-50.1		
214.2	38354.7	-57.1		
200.0	39777.6	-59.3		
184.4	41443.3	-62.0		
150.0	45668.4	-60.4		
144.6	46420.1	-61.3		
113.8	51349.7	-58.9		
100.0	54019.9	-59.9		
61.0	58371.8	-59.1		
70.0	61375.3	-61.6		
50.6	68374.1	-54.7		
30.0	79297.9	-49.9		
22.6	85490.5	-45.2		

STATION ALTITUDE 3989.00 FEET MSL
8 MAY 62
ASCENSION NO. 199 0926 MDT

UPPER AIR DATA
1200020199
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE 20

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KILOMETERS PER SECOND	WIND DIRECTION (DEG) SPEED (KNOTS)	INDEX OF REFRACTION
3989.0	878.8	17.4	29.0	1049.5	665.4	0.0	1.000260
4000.0	878.5	17.8	29.0	1049.1	665.4	.1	1.000260
4500.0	862.9	17.6	28.5	1031.2	665.2	4.7	1.000255
5000.0	847.7	17.8	27.7	1012.5	665.3	9.2	1.000251
5500.0	832.7	18.3	27.0	992.7	665.0	13.8	1.000247
6000.0	818.0	17.8	27.0	977.0	665.4	15.5	1.000242
6500.0	803.4	16.7	27.5	963.5	664.0	13.6	1.000238
7000.0	788.9	15.4	28.1	950.1	662.6	12.5	1.000234
7500.0	774.7	14.2	28.7	937.2	661.1	12.3	1.000230
8000.0	760.8	12.9	29.3	924.4	659.6	13.2	1.000226
8500.0	747.1	11.7	29.9	911.9	658.2	14.8	1.000222
9000.0	733.7	10.4	30.5	899.5	656.7	15.8	1.000219
9500.0	720.5	9.2	31.1	887.5	655.2	16.5	1.000215
10000.0	707.5	7.9	31.7	875.3	653.7	16.3	1.000211
10500.0	694.6	6.6	32.8	863.5	652.2	15.9	1.000208
11000.0	681.7	5.3	34.7	851.5	650.6	16.6	1.000205
11500.0	669.0	3.9	36.5	839.6	649.0	17.4	1.000202
12000.0	656.6	2.5	38.4	828.3	647.4	18.2	1.000199
12500.0	644.4	1.2	40.3	817.0	645.7	18.9	1.000196
13000.0	632.4	-0.2	42.2	805.9	644.1	19.3	1.000192
13500.0	620.4	-1.6	43.9	794.9	642.4	19.8	1.000189
14000.0	608.6	-3.1	45.4	783.9	640.7	20.4	1.000186
14500.0	596.9	-4.6	47.0	773.2	638.9	21.3	1.000183
15000.0	585.5	-6.0	48.6	762.6	637.1	22.2	1.000180
15500.0	574.3	-7.5	50.1	752.2	635.3	21.5	1.000177
16000.0	563.3	-8.9	46.1	741.9	633.6	20.6	1.000173
16500.0	552.3	-9.8	31.8	730.1	632.4	20.3	1.000168
17000.0	541.5	-10.6	20.0	718.1	631.4	20.1	1.000163
17500.0	530.8	-11.7	20.0	707.1	630.0	21.8	1.000160
18000.0	520.3	-12.9	20.0	696.2	628.6	23.4	1.000158
18500.0	510.1	-14.0	20.0	685.5	627.2	24.3	1.000155
19000.0	500.0	-15.2	20.0	675.1	625.8	25.1	1.000152
19500.0	489.9	-16.2	20.2	664.2	624.5	25.0	1.000150
20000.0	480.0	-17.3	20.3	653.4	623.2	24.9	1.000147
20500.0	470.4	-18.3	20.5	642.9	621.9	24.9	1.000145
21000.0	460.9	-19.4	20.7	632.6	620.7	24.8	1.000142
21500.0	451.6	-20.4	20.6	622.4	619.4	25.5	1.000140
22000.0	442.5	-21.5	21.0	612.3	618.1	26.2	1.000138
22500.0	433.4	-22.4	21.0	601.9	616.0	27.4	1.000135
23000.0	424.4	-23.3	21.0	591.7	615.0	28.0	1.000133

STATION ALTITUDE 3989.00 FEET MSL
8 MAY 62 0926 MDT
ASCENSION NO. 199

UPPER AIR DATA
1280020199
WHALE SAWS

TABLE 20 Cont'd

ORODLITIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA CORRECTION DEGREES (IN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	415.7	-24.2	21.0	581.7	614.7	243.7	30.2	1.000151
24000.0	407.2	-25.1	21.0	571.0	613.0	243.3	31.5	1.000126
24500.0	398.8	-26.1	21.1	562.1	612.4	243.0	32.4	1.000126
25000.0	390.4	-27.2	21.7	552.8	611.1	243.0	33.2	1.000124
25500.0	382.2	-28.3	22.2	543.6	609.7	243.1	34.3	1.000122
26000.0	374.2	-29.3	22.8	534.0	608.3	243.3	35.3	1.000120
26500.0	366.3	-30.4	23.4	525.7	607.0	243.5	36.1	1.000118
27000.0	358.6	-31.5	24.0	517.0	605.0	243.2	36.7	1.000116
27500.0	350.9	-32.8	24.0	508.5	604.0	244.4	36.2	1.000114
28000.0	343.4	-34.0	24.0	500.2	602.5	243.0	35.7	1.000112
28500.0	336.0	-35.2	24.0	492.0	600.9	240.4	35.1	1.000110
29000.0	328.8	-36.5	24.0	483.9	599.4	247.2	34.5	1.000108
29500.0	321.6	-37.6	20.7**	475.7	597.9	243.7	34.5	1.000106
30000.0	314.6	-38.7	14.1**	467.5	595.5	244.0	34.5	1.000104
30500.0	307.7	-39.8	7.6**	459.3	593.2	242.3	34.2	1.000102
31000.0	301.0	-40.8	1.0**	451.3	591.0	241.7	33.5	1.000101
31500.0	294.3	-41.4		442.5	589.0	241.2	32.6	1.000099
32000.0	287.7	-42.6		434.0	587.0	241.2	30.9	1.000097
32500.0	281.2	-43.8		427.1	585.0	240.9	29.2	1.000095
33000.0	274.9	-45.0		419.7	580.4	241.0	29.5	1.000093
33500.0	268.7	-46.2		412.5	580.9	241.2	29.8	1.000092
34000.0	262.6	-47.5		405.4	580.3	242.0	30.3	1.000090
34500.0	256.7	-48.7		398.4	583.7	243.0	31.0	1.000089
35000.0	250.9	-49.9		391.5	582.1	243.7	31.1	1.000087
35500.0	245.1	-51.0		384.3	580.7	244.1	30.2	1.000086
36000.0	239.4	-52.1		377.2	579.3	244.4	29.9	1.000084
36500.0	233.8	-53.1		370.2	577.9	244.1	32.3	1.000082
37000.0	228.3	-54.2		363.3	576.5	243.9	34.7	1.000081
37500.0	222.6	-55.3		356.0	575.0	243.9	37.3	1.000079
38000.0	217.8	-56.3		350.0	573.0	244.0	39.9	1.000078
38500.0	212.7	-57.3		343.2	572.3	244.1	41.1	1.000076
39000.0	207.6	-58.1		336.4	571.3	244.2	41.9	1.000075
39500.0	202.7	-58.9		329.5	570.3	244.4	42.0	1.000073
40000.0	197.8	-59.7		322.6	569.2	244.6	43.9	1.000072
40500.0	193.1	-60.5		316.3	568.1	245.2	45.0	1.000070
41000.0	188.4	-61.3		309.0	567.1	245.7	46.3	1.000069
41500.0	183.9	-62.0		303.4	566.1	246.4	47.9	1.000068
42000.0	179.5	-61.3		295.0	565.4	249.0	49.2	1.000066
42500.0	175.1	-61.6		286.4	565.0	250.5	50.0	1.000064
43000.0	170.9	-61.4		281.2	565.9	251.1	50.8	1.000063

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED FOR INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL
8 MAY 32 0926 MDT
ASCENSION NO. 199

UPPER AIR DATA
1280020199
WHITE SANDS

GEODLTIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 20 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND METER KNOTS	WIND DATA DIRECTION (IN) SPEED (IN) KNOTS	INDEX OF REFRACTION
43500.0	100.8	-61.2		274.1	567.1	230.9	1.0000001
44000.0	162.7	-61.0		267.3	567.4	230.0	1.0000000
44500.0	150.8	-60.8		260.6	567.6	230.7	1.0000058
45000.0	155.0	-60.7		254.1	567.9	231.5	1.0000057
45500.0	151.2	-60.5		247.7	568.2	232.2	1.0000055
46000.0	147.6	-60.8		242.1	567.7	230.9	1.0000054
46500.0	144.0	-61.3		236.8	567.1	243.1	1.0000053
47000.0	140.6	-61.0		230.9	567.4	247.2	1.0000051
47500.0	137.2	-60.8		225.1	567.7	243.0	1.0000050
48000.0	133.9	-60.5		219.4	568.1	242.7	1.0000049
48500.0	130.7	-60.3		213.9	568.4	242.1	1.0000048
49000.0	127.6	-60.0		208.5	568.7	244.0	1.0000046
49500.0	124.5	-59.8		203.3	569.0	245.9	1.0000045
50000.0	121.5	-59.6		198.2	569.4	246.0	1.0000044
50500.0	118.6	-59.3		193.2	569.7	250.2	1.0000043
51000.0	115.8	-59.1		188.4	570.0	252.2	1.0000042
51500.0	113.0	-59.0		183.7	570.2	253.2	1.0000041
52000.0	110.3	-59.1		179.5	569.9	254.1	1.0000040
52500.0	107.6	-59.3		175.4	569.7	254.0	1.0000039
53000.0	105.1	-59.5		171.3	569.4	255.3	1.0000038
53500.0	102.5	-59.7		167.4	569.2	255.9	1.0000037
54000.0	100.1	-59.9		163.5	568.9	257.7	1.0000036
54500.0	97.7	-59.8		159.5	569.0	259.9	1.0000036
55000.0	95.4	-59.7		155.7	569.1	261.4	1.0000035
55500.0	93.1	-59.6		151.9	569.3	261.4	1.0000034
56000.0	90.9	-59.5		148.2	569.4	261.4	1.0000033
56500.0	88.7	-59.4		144.6	569.5	263.7	1.0000032
57000.0	86.6	-59.4		141.0	569.6	264.6	1.0000031
57500.0	84.5	-59.3		137.6	569.8	260.7	1.0000030
58000.0	82.5	-59.2		134.3	569.9	248.2	1.0000029
58500.0	80.5	-59.2		131.1	569.6	243.7	1.0000028
59000.0	78.6	-59.6		128.2	569.3	232.0	1.0000027
59500.0	76.7	-60.0		125.3	568.7	204.3	1.0000026
60000.0	74.8	-60.5		122.6	568.2	197.5	1.0000025
60500.0	73.0	-60.9		119.9	567.6	200.6	1.0000024
61000.0	71.3	-61.3		117.2	567.1	202.9	1.0000023
61500.0	69.6	-61.5		114.5	566.6	207.2	1.0000022
62000.0	67.9	-61.0		111.5	567.5	212.1	1.0000021
62500.0	66.3	-60.5		108.6	566.1	216.0	1.0000020
63000.0	64.7	-60.0		105.8	565.8	219.4	1.0000019

STATION ALTITUDE 5939.00 FEET MSL
8 MAY 62 0926 MDT
ASCENSION NO. 179

UPLINK AIR DATA
1200020199
WHITE SANDS

COMPUTED CORRECTIONS
32.000005 LAT DEG
106.57055 LONG DEG

TABLE 20 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND METERS PER SECOND	CORRECTION MULTIPLIER (IN)	DEPTH METERS	INDEX OF REFRACTION
63500.0	63.2	-59.5		103.1	509.4	223.2	27.5	1.000023
64000.0	61.7	-59.0		100.4	570.1	227.0	29.7	1.000022
64500.0	60.2	-58.5		97.6	570.7	230.7	21.7	1.000022
65000.0	58.8	-58.0		95.2	571.4	233.6	17.7	1.000021
65500.0	57.4	-57.5		92.8	572.1	240.7	14.5	1.000021
66000.0	56.0	-57.0		90.3	572.7	235.0	13.7	1.000020
66500.0	54.7	-56.5		88.0	573.4	232.0	12.9	1.000020
67000.0	53.4	-56.1		85.7	574.0	229.0	12.3	1.000019
67500.0	52.1	-55.6		83.3	574.7	231.7	12.1	1.000019
68000.0	50.9	-55.1		81.3	575.3	233.9	12.0	1.000018
68500.0	49.7	-54.6		79.2	575.9	233.4	11.2	1.000018
69000.0	48.6	-54.4		77.3	576.2	230.2	10.0	1.000017
69500.0	47.4	-54.2		75.5	576.5	226.2	8.8	1.000017
70000.0	46.3	-54.0		73.7	576.7	220.3	8.4	1.000016
70500.0	45.3	-53.8		71.9	577.0	213.9	8.1	1.000016
71000.0	44.2	-53.5		70.2	577.3	207.2	8.0	1.000016
71500.0	43.2	-53.3		68.5	577.6	200.4	8.0	1.000015
72000.0	42.2	-53.1		66.8	577.9	193.7	8.1	1.000015
72500.0	41.2	-52.9		65.2	578.2	187.1	8.0	1.000015
73000.0	40.3	-52.7		63.6	578.5	203.7	8.0	1.000014
73500.0	39.3	-52.4		62.1	578.8	211.4	8.0	1.000014
74000.0	38.4	-52.2		60.6	579.0	220.4	7.4	1.000013
74500.0	37.5	-52.0		59.1	579.3	222.7	7.4	1.000013
75000.0	36.7	-51.8		57.7	579.6	243.0	7.2	1.000013
75500.0	35.8	-51.6		56.3	579.9	240.4	6.3	1.000013
76000.0	35.0	-51.3		55.0	580.2	239.4	5.5	1.000012
76500.0	34.2	-51.1		53.7	580.5	223.7	4.9	1.000012
77000.0	33.4	-50.9		52.4	580.8	220.7	4.5	1.000012
77500.0	32.6	-50.7		51.1	581.1	240.4	4.0	1.000011
78000.0	31.9	-50.5		49.9	581.3	233.4	3.9	1.000011
78500.0	31.1	-50.3		48.7	581.6	240.9	4.0	1.000011
79000.0	30.4	-50.0		47.5	581.9	261.6	4.4	1.000011
79500.0	29.7	-49.7		46.4	582.3	247.7	4.9	1.000010
80000.0	29.1	-49.4		45.2	582.6	237.0	5.6	1.000010
80500.0	28.4	-49.0		44.1	583.3	214.4	6.8	1.000010
81000.0	27.6	-48.6		43.1	583.6	217.3	6.6	1.000010
81500.0	27.1	-48.2		42.0	584.3	213.2	10.8	1.000009
82000.0	26.5	-47.8		41.0	584.6	216.0	11.5	1.000009
82500.0	25.9	-47.5		40.0	585.3	210.9	11.1	1.000009
83000.0	25.3	-47.1		39.0	585.7	214.9	10.7	1.000009

STATION ALTITUDE 3989.10 FEET MSL

8 MAY 82

ASCENSION NO. 199

UPPER AIR DATA

1250020199

WHITE SANDS

GEOMETRIC COORDINATES

32.40043 LAT DEG

106.37033 LON DEG

0926 MDT

TABLE 20 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED KNOTS	INDEX OF REFRACTION
63500.0	24.8	-46.7		36.1	586.2		1.0000008
64000.0	24.2	-46.3		37.2	586.7		1.0000008
64500.0	23.6	-46.0		36.3	587.2		1.0000008
65000.0	23.1	-45.6		35.4	587.7		1.0000008

STATION ALTITUDE 3909.00 FEET MSL
8 MAY 62 0926 MDT
ASCENSION NO. 199

MANDATORY LEVELS
1280020199
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
100.37033 LONG DEG

TABLE 21

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	"LOW DATA"	
MILLIBARS	FEET	AIR DEGREES	TEMP OF POINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4420.	17.5	-1.2	20.	180.1	0.5
800.0	6619.	16.4	-2.3	28.	180.2	13.1
750.0	8405.	11.9	-5.2	30.	207.2	14.5
700.0	10283.	7.2	-8.4	32.	220.3	10.1
650.0	12264.	1.8	-10.3	39.	232.1	10.6
600.0	14359.	-4.2	-13.9	47.	232.2	21.0
550.0	16584.	-9.9	-24.7	29.	239.3	20.2
500.0	18973.	-15.2	-33.0	20.	240.0	25.1
450.0	21558.	-20.6	-37.2	21.	251.2	25.6
400.0	24380.	-25.9	-41.7	21.	244.4	32.2
350.0	27515.	-32.9	-46.5	24.	244.3	30.1
300.0	31011.	-41.0			242.2	33.5
250.0	35004.	-50.1			243.0	31.0
200.0	39082.	-59.3			244.0	43.3
175.0	42403.	-61.6			250.4	50.0
150.0	45540.	-60.4			252.2	50.0
125.0	49270.	-59.8			245.3	40.3
100.0	53853.	-59.9			257.7	30.7
89.0	58435.	-59.3			240.0	0.5
70.0	61165.	-61.6			205.4	23.0
60.0	64322.	-58.4			250.9	21.5
50.0	68117.	-54.7			234.2	11.6
40.0	72824.	-52.6			204.0	0.0
30.0	78958.	-49.9			291.0	4.6
25.0	82896.	-46.9				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 62 0925 MDT
 ASCENSION NO. 134

SIGINT ICANT LEVEL DATA
 1280010134
 110LLOMAN

GEODETIC COORDINATES
 32.83865 LAT DEG
 106.09965 LONG DEG

TABLE 22

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE A.I.R	TEMPERATURE DEWPOINT	REL. HUM.
MILLIBARS	MSL FEET	DEGREES	CENTIGRADE	PERCENT
874.2	4126.6	17.9	-6.2	16.0
863.2	4481.7	17.8	.0	30.0
853.0	4796.6	19.7	-2.3	26.0
850.0	4915.8	19.2	-2.7	26.0
779.2	7340.6	14.2	-4.0	26.0
700.0	10278.0	6.8	-8.2	33.0
566.8	15815.7	-8.8	-16.4	54.0
541.1	16993.0	-11.0	-22.0	37.0
500.0	18970.7	-15.7	-29.0	29.0
400.0	24400.5	-25.6	-40.1	24.0
312.0	30184.0	-37.8	-43.0	27.0
300.0	31069.9	-40.0		
250.0	35087.1	-49.4		
200.0	39783.0	-60.7		
158.3	44552.4	-63.0		
154.2	45087.0	-61.3		
150.0	45651.4	-61.7		
137.8	47380.8	-62.4		
129.5	48659.5	-57.7		
109.4	52162.9	-58.6		
100.0	54018.6	-60.2		
91.7	55790.2	-63.0		
80.4	58676.5	-60.7		
74.4	60059.6	-63.4		
70.6	61308.2	-59.3		
56.4	65767.4	-60.2		
53.5	66868.1	-55.1		
50.0	68290.8	-56.6		
45.6	72232.5	-54.1		
43.8	71084.1	-55.3		
40.4	72799.2	-52.5		
30.0	79179.3	-51.1		
24.1	83910.2	-49.3		
20.0	87996.5	-44.9		
12.9	97820.2	-39.5		
10.0	103613.1	-38.1		

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 52 0925 MDT
 ASCENSION NO. 134

UPPER AIR DATA
 1200016134
 HOLLUMALL

GEODETIC COORDINATES
 32.88865 LAT DEG
 106.89965 LONG DEG

TABLE 23

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND METERS PER SECOND	WIND DATA DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
4126.0	874.2	17.9	16.0	1094.9	665.1	210.0	6.0	1.000247
4500.0	862.6	17.9	29.8	1029.7	655.5	190.4	7.2	1.000257
5000.0	847.4	19.0	26.1	1007.0	650.8	180.2	9.1	1.000250
5500.0	832.4	18.0	26.5	993.5	645.0	171.0	11.2	1.000246
6000.0	817.7	17.0	26.9	979.5	644.4	163.9	11.5	1.000242
6500.0	803.2	15.9	27.3	965.6	643.2	150.1	10.9	1.000238
7000.0	788.9	14.9	27.7	951.9	642.0	140.0	10.1	1.000234
7500.0	774.8	13.8	28.3	938.0	640.7	201.7	9.9	1.000230
8000.0	760.8	12.6	29.1	925.7	639.2	260.1	10.2	1.000226
8500.0	747.0	11.3	30.0	913.1	637.7	208.5	10.9	1.000222
9000.0	733.5	10.0	30.8	900.6	636.2	210.0	11.9	1.000219
9500.0	720.2	8.8	31.7	888.5	634.7	210.2	14.1	1.000215
10000.0	707.2	7.5	32.5	876.2	633.2	220.0	16.5	1.000211
10500.0	694.1	6.2	33.8	864.2	631.7	224.5	19.3	1.000208
11000.0	681.0	4.8	35.7	852.2	630.0	227.0	20.6	1.000205
11500.0	668.1	3.4	37.6	840.4	628.5	230.0	21.4	1.000202
12000.0	655.5	1.9	39.5	828.6	626.7	233.9	20.8	1.000199
12500.0	643.2	.5	41.4	817.4	625.0	235.9	20.5	1.000195
13000.0	631.0	-9.9	43.3	806.1	623.5	239.2	20.6	1.000192
13500.0	619.1	-2.3	45.2	795.1	621.0	241.5	20.7	1.000189
14000.0	607.4	-3.7	47.1	784.2	619.9	244.0	20.9	1.000186
14500.0	595.9	-5.1	49.0	773.5	618.2	245.0	21.1	1.000183
15000.0	584.7	-6.5	50.9	762.9	616.5	242.4	21.7	1.000180
15500.0	573.7	-7.9	52.8	752.0	614.8	240.0	22.9	1.000177
16000.0	562.7	-9.1	51.3	741.7	613.5	240.9	24.8	1.000174
16500.0	551.7	-10.1	44.1	730.0	612.1	242.7	26.8	1.000169
17000.0	540.9	-11.0	37.0	718.4	611.0	245.5	26.6	1.000165
17500.0	530.3	-12.2	34.9	707.5	629.5	240.7	25.6	1.000162
18000.0	519.8	-13.4	32.9	696.7	628.0	243.9	25.3	1.000159
18500.0	509.5	-14.6	30.9	686.1	626.0	242.2	22.4	1.000156
19000.0	499.4	-15.8	29.0	675.6	625.1	235.0	22.4	1.000153
19500.0	489.2	-16.7	28.5	664.5	624.0	222.1	23.6	1.000151
20000.0	479.3	-17.6	28.1	653.1	622.9	245.0	25.3	1.000148
20500.0	469.5	-18.5	27.6	642.1	621.8	243.7	27.4	1.000145
21000.0	460.0	-19.4	27.1	631.5	620.7	249.0	29.4	1.000143
21500.0	450.6	-20.3	26.7	620.7	619.5	244.0	30.6	1.000140
22000.0	441.5	-21.2	26.2	610.5	618.4	249.5	31.6	1.000138
22500.0	432.5	-22.1	25.8	600.1	617.3	245.0	32.0	1.000135
23000.0	423.7	-23.0	25.3	590.0	616.2	246.1	32.4	1.000133
23500.0	415.1	-24.0	24.6	580.2	615.0	240.9	32.4	1.000131

STATION ALTITUDE 4126.59 FEET MSL
8 MAY 62 0925 MDT
ASCENSION NO. 134

UPLR AIR DATA
1280010134
HOLLAMAN

GEOMETRIC ALTITUDE 4126.59 FEET MSL
8 MAY 62 0925 MDT
ASCENSION NO. 134

UPLR AIR DATA
1280010134
HOLLAMAN

TABLE 23 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KIOTS	WIND DIRECTION (DEGREES (IN))	WIND SPEED KIOTS	INDEX OF REFRACTION
24000.0	400.6	-24.9	24.4	570.5	613.9	249.0	32.4	1.000128
24500.0	390.3	-25.0	24.1	560.9	612.7	251.1	32.7	1.000126
25000.0	389.8	-26.9	24.3	551.5	611.4	251.5	33.1	1.000124
25500.0	361.5	-27.9	24.6	541.9	610.1	250.5	33.8	1.000122
26000.0	373.4	-29.0	24.8	532.7	608.8	249.0	34.2	1.000120
26500.0	365.5	-30.0	25.1	523.7	607.5	248.0	34.4	1.000117
27000.0	357.7	-31.1	25.3	514.8	606.2	246.2	34.5	1.000115
27500.0	350.1	-32.1	25.6	506.0	604.8	247.0	34.6	1.000113
28000.0	342.7	-33.2	25.9	497.5	603.5	247.0	34.8	1.000111
28500.0	335.4	-34.2	26.1	489.0	602.2	247.0	34.9	1.000109
29000.0	328.3	-35.3	26.4	480.6	600.8	247.4	34.2	1.000108
29500.0	321.3	-36.4	26.6	472.7	599.5	247.0	33.4	1.000106
30000.0	314.5	-37.4	26.9	464.7	598.2	246.6	31.0	1.000104
30500.0	307.7	-38.6	27.4**	456.9	596.7	246.7	28.8	1.000102
31000.0	300.9	-39.8	21.1**	449.3	595.1	247.0	27.7	1.000100
31500.0	294.2	-41.0		441.5	593.6	246.0	26.7	1.000098
32000.0	287.6	-42.2		433.6	592.1	247.5	27.4	1.000097
32500.0	281.1	-43.3		426.2	590.6	246.3	26.0	1.000095
33000.0	274.8	-44.5		418.0	589.1	245.0	28.7	1.000093
33500.0	268.7	-45.7		411.5	587.6	243.4	29.4	1.000092
34000.0	262.6	-46.9		404.3	586.0	243.9	29.6	1.000090
34500.0	256.0	-48.0		397.3	584.5	240.7	29.6	1.000088
35000.0	251.0	-49.2		390.4	583.0	247.1	29.5	1.000087
35500.0	245.1	-50.4		383.4	581.4	247.0	29.2	1.000085
36000.0	239.4	-51.6		376.4	579.9	247.0	29.1	1.000084
36500.0	233.8	-52.8		369.6	578.3	243.1	29.5	1.000082
37000.0	228.3	-54.0		362.9	576.7	244.5	30.0	1.000081
37500.0	222.9	-55.2		356.3	575.1	243.3	30.8	1.000079
38000.0	217.7	-56.4		349.9	573.5	242.1	31.7	1.000078
38500.0	212.6	-57.6		343.6	571.9	241.4	33.0	1.000077
39000.0	207.6	-58.8		337.4	570.3	240.9	34.4	1.000075
39500.0	202.7	-60.0		331.3	568.7	241.4	36.7	1.000074
40000.0	197.9	-60.8		324.6	567.1	242.5	39.8	1.000072
40500.0	193.1	-61.0		317.1	565.4	243.0	42.2	1.000071
41000.0	188.4	-61.3		309.8	563.1	243.1	42.6	1.000069
41500.0	183.9	-61.5		302.7	560.7	243.7	43.1	1.000067
42000.0	179.4	-61.8		295.7	560.4	247.4	43.7	1.000066
42500.0	175.1	-62.0		288.6	560.1	246.0	44.3	1.000064
43000.0	170.8	-62.3		282.2	560.0	249.3	46.4	1.000063
43500.0	166.7	-62.5		275.6	560.4	250.0	49.0	1.000061

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
8 MAY 62 0925 MDT
ASCENSION NO. 134

UPPER AIR DATA
1280010134
HOLLUMAR

TABLE 23 Cont'd

GEOMETRIC ALTITUDE
32.00865 LAT DEG
106.09965 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KILOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KILOTS	INDEX OF REFRACTION
44000.0	162.6	-62.7		269.3	563.1	251.5	50.1	1.000000
44500.0	156.7	-63.0		263.1	564.8	251.9	49.7	1.000059
45000.0	154.9	-61.6		255.0	566.7	252.0	49.4	1.000057
45500.0	151.1	-61.6		246.6	568.6	251.5	49.3	1.000055
46000.0	147.5	-61.8		243.1	569.3	250.4	49.3	1.000054
46500.0	143.9	-62.0		237.4	569.0	249.1	49.7	1.000053
47000.0	140.4	-62.2		231.9	568.8	248.0	50.4	1.000052
47500.0	137.0	-62.0		226.0	568.1	247.6	52.3	1.000050
48000.0	133.7	-60.1		218.7	568.6	247.0	53.7	1.000049
48500.0	130.5	-58.3		211.0	571.1	246.6	53.8	1.000047
49000.0	127.4	-57.0		206.1	571.7	247.4	53.4	1.000046
49500.0	124.4	-57.9		201.3	571.5	249.0	51.4	1.000045
50000.0	121.4	-58.0		196.6	571.4	249.9	49.3	1.000044
50500.0	118.5	-58.2		192.1	571.2	250.1	48.4	1.000043
51000.0	115.7	-58.3		187.0	571.0	250.4	47.6	1.000042
51500.0	112.9	-58.4		183.2	570.9	250.9	45.4	1.000041
52000.0	110.3	-58.6		179.0	570.7	251.4	43.1	1.000040
52500.0	107.6	-58.9		175.0	570.5	254.5	38.0	1.000039
53000.0	105.1	-59.3		171.2	569.7	260.0	32.0	1.000038
53500.0	102.5	-59.5		167.4	569.1	262.5	28.5	1.000037
54000.0	100.1	-60.2		163.7	568.5	261.0	27.1	1.000036
54500.0	97.7	-61.0		160.4	567.5	257.2	26.8	1.000035
55000.0	95.3	-61.8		157.1	566.4	258.5	28.7	1.000035
55500.0	93.0	-62.5		153.6	565.4	245.3	30.5	1.000034
56000.0	90.8	-62.8		150.3	565.0	245.5	30.6	1.000033
56500.0	88.6	-62.4		146.4	565.0	245.5	30.7	1.000033
57000.0	86.4	-62.0		142.6	566.1	247.7	27.3	1.000032
57500.0	84.3	-61.5		138.6	566.7	251.1	23.6	1.000031
58000.0	82.3	-61.1		135.2	567.3	253.6	19.4	1.000030
58500.0	80.3	-60.7		131.7	567.8	255.4	14.9	1.000029
59000.0	78.4	-61.6		129.0	568.6	253.1	13.7	1.000029
59500.0	76.5	-62.4		126.4	569.3	241.6	19.3	1.000028
60000.0	74.6	-63.3		123.9	564.4	235.7	25.4	1.000028
60500.0	72.8	-62.0		120.1	566.2	225.6	25.2	1.000027
61000.0	71.1	-60.3		116.3	568.0	215.2	25.7	1.000026
61500.0	69.4	-59.3		113.0	569.7	207.6	22.3	1.000025
62000.0	67.7	-59.4		110.3	569.5	195.2	16.2	1.000025
62500.0	66.1	-59.5		107.6	569.4	184.6	11.3	1.000024
63000.0	64.5	-59.6		105.2	569.3	174.5	8.9	1.000023
63500.0	62.9	-59.7		102.6	569.1	164.5	6.9	1.000023

GEODETIC COORDINATES
 32.88865 LAT DEG
 106.09965 LONG DEG

UPPER AIR DATA
 1280010134
 HOLLAMAN
 TABLE 23

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 82
 0925 MDT
 ASCENSION NO. 134

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
64000.0	61.4	-59.8		100.3	569.0	222.3	8.8	1.000022
64500.0	60.0	-59.9		98.0	568.8	220.2	12.3	1.000022
65000.0	58.5	-60.0		95.7	568.7	227.4	16.1	1.000021
65500.0	57.1	-60.1		93.4	568.6	234.1	21.7	1.000021
66000.0	55.8	-59.1		90.8	569.9	236.6	27.4	1.000020
66500.0	54.5	-58.6		87.7	573.0	237.4	30.5	1.000020
67000.0	53.2	-55.2		85.0	575.1	237.3	32.4	1.000019
67500.0	51.9	-55.8		83.2	574.4	237.1	33.7	1.000019
68000.0	50.7	-56.3		81.4	573.7	236.6	31.3	1.000018
68500.0	49.5	-56.3		79.3	573.6	236.3	28.9	1.000018
69000.0	48.3	-55.7		77.4	574.5	234.3	22.5	1.000017
69500.0	47.2	-55.0		75.4	575.3	225.7	12.1	1.000017
70000.0	46.1	-54.4		73.4	576.2	165.2	3.9	1.000016
70500.0	45.0	-54.5		71.7	576.1	108.9	5.3	1.000016
71000.0	44.0	-55.2		70.3	575.2	93.2	7.6	1.000016
71500.0	43.0	-54.6		68.5	575.9	80.4	9.5	1.000015
72000.0	42.0	-53.8		66.6	577.0	100.4	5.3	1.000015
72500.0	41.0	-53.0		64.8	578.1	171.6	4.0	1.000014
73000.0	40.0	-52.5		63.2	578.7	200.9	5.6	1.000014
73500.0	39.1	-52.3		61.7	578.9	133.2	4.8	1.000014
74000.0	38.2	-52.2		60.2	579.0	187.3	4.1	1.000013
74500.0	37.3	-52.1		58.6	579.2	187.2	3.7	1.000013
75000.0	36.5	-52.0		57.4	579.3	194.7	3.5	1.000013
75500.0	35.6	-51.9		56.1	579.5	202.6	3.4	1.000012
76000.0	34.8	-51.8		54.8	579.6	197.0	2.7	1.000012
76500.0	34.0	-51.7		53.5	579.8	161.8	1.9	1.000012
77000.0	33.2	-51.6		52.2	579.9	140.1	1.5	1.000012
77500.0	32.4	-51.5		51.0	580.0	146.4	1.2	1.000011
78000.0	31.7	-51.4		49.6	580.2	103.9	.9	1.000011
78500.0	31.0	-51.2		48.0	580.3	190.3	.8	1.000011
79000.0	30.3	-51.1		47.5	580.5	233.4	2.8	1.000011
79500.0	29.6	-51.0		46.3	580.7	241.2	5.3	1.000010
80000.0	28.9	-50.8		45.2	580.9	243.2	7.8	1.000010
80500.0	28.2	-50.6		44.2	581.2	230.2	6.7	1.000010
81000.0	27.6	-50.4		43.1	581.4	230.0	9.7	1.000010
81500.0	26.9	-50.2		42.1	581.7	200.7	10.9	1.000009
82000.0	26.3	-50.0		41.1	581.9	204.6	13.4	1.000009
82500.0	25.7	-49.8		40.1	582.2	207.3	16.1	1.000009
83000.0	25.1	-49.6		39.2	582.4	209.3	18.6	1.000009
83500.0	24.6	-49.5		38.3	582.7	209.6	20.6	1.000009

UPPER AIR DATA
120010134
HOLLOMAN
CLOUDTIC COORDINATES
52.00805 LAT DEG
100.09305 LON DEG

STATION ALTITUDE 4120.59 FEET MSL
8 MAY 62 0925 MDT
ASCENSION NO. 134

TABLE 23 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED (KNOTS)	INDEX OF REFRACTION
04000.0	24.0	-49.2		37.3	583.0	270.2	1.000008
04500.0	23.5	-48.7		30.4	583.7	270.5	1.000008
05000.0	22.9	-48.1		35.5	584.4	274.5	1.000008
05500.0	22.4	-47.6		34.6	585.1	282.2	1.000008
06000.0	21.9	-47.0		33.8	585.8	292.5	1.000008
06500.0	21.4	-46.5		32.9	586.5	304.3	1.000007
07000.0	20.9	-46.0		32.1	587.2	305.9	1.000007
07500.0	20.5	-45.4		31.3	587.9	307.6	1.000007
08000.0	20.0	-44.9		30.5	588.6	310.2	1.000007
08500.0	19.6	-44.6		29.8	588.9	296.6	1.000007
09000.0	19.1	-44.3		29.1	589.3	270.6	1.000006
09500.0	18.7	-44.1		28.4	589.6	260.7	1.000006
10000.0	18.3	-43.8		27.8	590.0	250.1	1.000006
10500.0	17.9	-43.5		27.1	590.3	244.6	1.000006
11000.0	17.5	-43.2		26.5	590.7	235.0	1.000006
11500.0	17.1	-43.0		25.9	591.1	236.4	1.000006
12000.0	16.7	-42.7		25.3	591.4	235.3	1.000006
12500.0	16.4	-42.4		24.7	591.8	240.5	1.000005
13000.0	16.0	-42.1		24.1	592.1	246.0	1.000005
13500.0	15.6	-41.9		23.6	592.5	251.7	1.000005
14000.0	15.3	-41.6		23.0	592.8	255.6	1.000005
14500.0	15.0	-41.3		22.5	593.2	260.2	1.000005
15000.0	14.6	-41.1		22.0	593.5	264.7	1.000005
15500.0	14.3	-40.8		21.4	593.9	267.2	1.000005
16000.0	14.0	-40.5		21.0	594.2	267.4	1.000005
16500.0	13.7	-40.2		20.5	594.6	267.6	1.000005
17000.0	13.4	-40.0		20.0	594.9	267.9	1.000004
17500.0	13.1	-39.7		19.5	595.3	270.7	1.000004
18000.0	12.8	-39.5		19.1	595.5	275.4	1.000004
18500.0	12.5	-39.3		18.7	595.7	275.6	1.000004
19000.0	12.2	-39.2		18.2	595.9	275.2	1.000004
19500.0	12.0	-39.1		17.8	596.0	280.0	1.000004
20000.0	11.7	-39.0		17.4	596.2	282.1	1.000004
20500.0	11.5	-38.9		17.0	596.3	283.7	1.000004
21000.0	11.2	-38.7		16.7	596.5		1.000004
21500.0	11.0	-38.6		16.3	596.8		1.000004
22000.0	10.7	-38.5		15.9	596.8		1.000004
22500.0	10.5	-38.4		15.6	596.9		1.000003
23000.0	10.3	-38.2		15.2	597.1		1.000003
23500.0	10.0	-38.1		14.9	597.2		1.000003

STATION ALTITUDE 4126.59 FEET MSL
8 MAY 62
ASCENSION NO. 134

MANDATORY LEVELS
1280010134
HOLLOMAN
TABLE 24

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LONG DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUMIDITY PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4912.	19.2	-7.7	20.	189.7	5.7
800.0	6610.	15.7	-3.0	27.	191.3	10.8
750.0	8393.	11.6	-5.5	30.	200.1	10.8
700.0	10268.	6.8	-8.3	33.	222.0	10.0
650.0	12246.	1.3	-10.0	40.	235.0	20.6
600.0	14337.	-4.6	-13.0	48.	243.7	21.0
550.0	16560.	-10.2	-20.4	43.	243.0	20.8
500.0	18945.	-15.7	-29.0	29.	253.0	22.4
450.0	21529.	-20.4	-34.0	27.	249.0	30.7
400.0	24361.	-25.6	-40.1	24.	250.0	32.6
350.0	27490.	-32.2	-45.3	20.	247.0	34.6
300.0	31010.	-40.0			247.9	27.0
250.0	35012.	-49.4			247.1	29.4
200.0	39689.	-60.7			242.0	30.4
175.0	42407.	-62.0			240.0	44.3
150.0	45531.	-61.7			251.1	49.3
125.0	49250.	-57.9			249.0	51.9
100.0	53854.	-60.2			201.0	27.1
80.0	58388.	-60.9			250.0	14.5
70.0	61101.	-59.3			210.2	20.2
60.0	64264.	-59.9			220.0	12.0
50.0	68037.	-56.6			230.0	30.0
40.0	72724.	-52.5			201.2	5.6
30.0	78844.	-51.1			237.9	3.5
25.0	82747.	-49.6			209.4	10.9
20.0	87587.	-44.9			310.0	11.2
15.0	93946.	-41.4			259.0	10.6
10.0	103053.	-38.1				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
8 MAY 62
ASCENSION 140. 37

SIGNIFICANT LEVEL DATA
1280030037
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49311 LONG DEG

TABLE 25

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR	TEMPERATURE DEWPOINT	REL. HUM.
MILLIBARS	MSL FEET	DEGREES	CENTIGRADE	PERCENT
877.5	4051.0	17.5	7.0	50.0
875.4	4118.2	17.3	-4.0	22.0
850.0	4939.7	15.5	-6.1	22.0
844.9	5106.9	14.9	-6.0	22.0
841.8	5209.2	16.7	-5.1	22.0
796.2	6761.6	15.5	-6.7	21.0
700.0	10267.7	6.5	-12.1	25.0
612.0	13842.0	-3.0	-16.1	37.0
554.7	16361.6	-11.0	-18.4	54.0
549.4	16604.0	-11.1	-29.0	20.0
540.0	17039.6	-11.1	-31.5	17.0
500.0	18964.7	-15.9	-31.5	25.0
433.4	22451.6	-24.1	-37.0	29.0
418.0	23318.6	-24.9	-40.0	21.0
400.0	24368.3	-26.5	-42.2	21.0
357.8	26904.5	-32.9	-46.1	25.0
343.8	27904.5	-35.2	-48.1	25.0
323.6	29287.5	-37.3	-50.5	24.0
300.0	30998.7	-40.3		
285.0	32144.0	-42.9		
250.0	35003.9	-50.0		
216.0	38102.5	-57.6		
200.0	39692.2	-60.6		
191.0	40633.2	-62.2		
167.6	43294.4	-62.2		
150.0	45549.8	-63.0		
142.2	46650.2	-64.3		
139.8	46975.0	-62.4		
130.6	48370.5	-59.4		
128.7	48674.1	-58.0		
123.2	49579.0	-59.3		
119.6	50192.6	-58.6		
107.9	52312.7	-61.4		
102.6	53344.9	-60.7		
100.0	53871.3	-61.2		
95.2	54875.5	-62.6		
85.9	56990.4	-58.0		
75.8	59503.9	-62.7		
70.0	61186.9	-61.9		
62.6	63977.1	-61.1		

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 82 0925 MDT
 ASCENSION 110. 57

SIGHTING ANT -EVELL DATA
 1280030037
 JALLEN

GEODOLITE COORDINATES
 33.16712 LAT DEG
 106.49511 LONG DEG

TABLE 25 Cont'd

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR	DEWPOINT DEGREES CENTIGRADE	
58.4 64910.3	-57.6		
54.8 66232.2	-59.2		
52.6 67088.6	-55.1		
50.0 68156.5	-55.8		
44.0 70835.6	-57.4		
39.4 73172.4	-51.7		
30.0 79025.9	-51.1		
24.4 83489.2	-49.3		
20.0 87837.6	-45.8		
14.9 94494.7	-44.3		
12.9 97570.3	-41.2		

STATION ALTITUDE 4051.00 FEET MSL
8 MAY 62 0925 MDT
ASCENSION NO. 37

UPPER AIR DATA
12000Z0057
GALLEN

GEOMETRIC COORDINATES
3.16712 LAT DEG
106.49511 LONG DEG

TABLE 26

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	WIND DIRECTION DEGREES TRUE	WIND SPEED KNOTS	INDEX OF REFRACTION
4051.0	877.5	17.5	50.0	1047.2	110.0	2.9	1.000278
4500.0	865.5	16.5	22.0	1030.6	140.0	3.1	1.000290
5000.0	840.2	15.3	22.0	1022.2	140.0	3.6	1.000295
5500.0	833.1	16.5	21.8	1000.2	161.4	4.5	1.000291
6000.0	818.3	16.1	21.5	985.7	172.5	5.4	1.000257
6500.0	803.7	15.7	21.2	967.0	192.7	6.7	1.000253
7000.0	769.3	14.9	21.3	953.0	204.9	8.5	1.000229
7500.0	775.0	15.6	21.8	939.9	212.5	10.3	1.000225
8000.0	761.0	12.3	22.4	927.1	210.5	12.3	1.000221
8500.0	747.2	11.1	23.0	914.5	217.4	14.3	1.000218
9000.0	733.7	9.8	23.5	902.0	210.4	16.2	1.000214
9500.0	720.4	8.5	24.1	889.0	219.2	17.8	1.000211
10000.0	707.4	7.2	24.7	877.7	221.2	19.0	1.000208
10500.0	694.4	5.9	25.7	865.8	224.0	19.7	1.000204
11000.0	681.4	4.5	27.4	853.9	229.2	20.1	1.000202
11500.0	668.7	3.1	29.1	842.3	220.1	20.1	1.000199
12000.0	655.1	1.6	30.8	830.0	220.6	20.3	1.000196
12500.0	643.9	.2	32.5	819.5	220.0	20.8	1.000193
13000.0	631.8	-1.2	34.2	806.4	220.4	21.3	1.000190
13500.0	620.0	-2.6	35.8	797.5	221.1	22.0	1.000187
14000.0	608.3	-4.1	38.1	786.0	223.0	22.5	1.000184
14500.0	596.5	-5.5	41.4	775.7	223.9	23.0	1.000182
15000.0	583.0	-7.0	44.8	764.9	223.2	23.3	1.000179
15500.0	573.7	-8.5	48.2	754.3	220.0	23.6	1.000176
16000.0	562.6	-9.9	51.6	743.0	223.7	23.2	1.000174
16500.0	551.7	-11.1	54.6	732.0	221.5	23.8	1.000168
17000.0	540.8	-11.1	17.3	713.8	223.2	21.9	1.000163
17500.0	530.2	-12.2	18.3	707.7	220.4	21.1	1.000160
18000.0	519.7	-13.5	21.0	697.0	227.9	20.9	1.000158
18500.0	509.4	-14.7	23.1	686.5	220.4	20.9	1.000155
19000.0	499.3	-16.0	25.0	676.1	220.1	21.0	1.000153
19500.0	489.1	-17.2	26.2	665.4	220.4	22.1	1.000151
20000.0	479.2	-18.3	26.8	655.6	220.5	22.3	1.000148
20500.0	469.5	-19.5	26.8	644.7	220.5	22.8	1.000146
21000.0	460.0	-20.7	27.3	634.5	227.1	23.2	1.000143
21500.0	450.6	-21.0	27.9	624.0	224.0	23.0	1.000141
22000.0	441.5	-23.0	28.5	614.0	221.7	26.4	1.000139
22500.0	432.5	-24.1	28.6	603.0	220.0	31.1	1.000136
23000.0	423.6	-24.6	23.9	593.0	227.0	33.0	1.000133
23500.0	414.8	-25.2	21.0	582.7	220.5	33.0	1.000131

STATION ALTITUDE 4051.00 FEET MSL
 R MAY 62 0925 MDT
 ASCENSION NO. 37

UPPER AIR DATA
 1200030337
 JALLEN

TABLE 26 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (IN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	400.2	-25.9	21.0	572.4	612.0	240.0	33.5	1.000128
24500.0	397.8	-26.8	21.2	562.5	611.5	240.5	34.4	1.000126
25000.0	389.4	-28.0	22.0	553.3	610.0	240.0	35.4	1.000124
25500.0	381.2	-29.3	22.7	544.4	608.4	247.0	36.5	1.000122
26000.0	373.1	-30.5	23.5	535.0	606.9	247.5	36.8	1.000120
26500.0	365.3	-31.7	24.3	527.0	605.4	247.7	36.0	1.000118
27000.0	357.6	-32.9	25.0	518.5	603.8	247.4	35.4	1.000116
27500.0	349.9	-34.2	25.0	510.0	602.3	240.0	34.9	1.000114
28000.0	342.4	-35.3	24.9	501.5	600.0	243.2	33.7	1.000112
28500.0	335.0	-36.1	24.6	492.2	599.8	243.4	32.3	1.000110
29000.0	327.7	-36.9	24.2	483.1	598.9	243.0	31.8	1.000108
29500.0	320.6	-37.7	21.0**	474.2	597.8	242.9	31.4	1.000106
30000.0	313.6	-38.5	14.0**	465.0	596.7	243.5	32.0	1.000104
30500.0	306.7	-39.4	7.0**	457.1	595.0	243.0	33.9	1.000102
31000.0	300.0	-40.3		448.0	594.5	244.0	34.1	1.000100
31500.0	293.3	-41.4		441.0	593.0	244.2	34.4	1.000098
32000.0	286.8	-42.6		433.4	591.6	243.5	34.3	1.000097
32500.0	280.4	-43.8		425.9	590.0	240.4	34.2	1.000095
33000.0	274.1	-45.0		418.5	588.4	240.5	34.0	1.000093
33500.0	267.9	-46.3		411.3	586.0	240.5	33.7	1.000092
34000.0	261.8	-47.5		404.2	583.2	240.4	33.7	1.000090
34500.0	255.9	-48.7		397.2	580.0	240.0	33.9	1.000088
35000.0	250.1	-50.0		390.4	582.0	240.0	33.9	1.000087
35500.0	244.3	-51.2		383.4	580.4	247.0	33.9	1.000085
36000.0	238.6	-52.4		376.5	578.0	240.0	34.1	1.000084
36500.0	233.0	-53.7		369.0	577.2	243.1	34.9	1.000082
37000.0	227.6	-54.9		362.2	575.5	243.7	35.7	1.000081
37500.0	222.2	-56.1		356.7	573.9	243.5	36.7	1.000079
38000.0	217.0	-57.3		350.4	572.5	242.0	37.6	1.000078
38500.0	211.9	-58.4		343.0	571.0	243.0	39.4	1.000077
39000.0	206.0	-59.3		336.9	569.7	243.0	41.1	1.000075
39500.0	201.9	-60.2		330.5	568.5	244.5	42.9	1.000074
40000.0	197.0	-61.1		323.7	567.3	244.0	44.6	1.000072
40500.0	192.2	-62.0		317.1	566.1	243.5	46.2	1.000071
41000.0	187.6	-62.2		309.8	565.0	243.0	47.7	1.000069
41500.0	183.0	-62.2		302.5	563.8	240.1	49.0	1.000067
42000.0	178.6	-62.2		294.9	562.6	240.2	50.3	1.000066
42500.0	174.3	-62.2		287.0	561.6	240.4	51.1	1.000064
43000.0	170.0	-62.2		280.0	560.8	247.2	50.0	1.000063
43500.0	165.9	-62.3		274.1	560.7	247.9	50.1	1.000061

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED AT THE INTERPOLATION.

STATION ALTITUDE 6051.00 FEET MSL
8 MAY 62 0925 MDI
ASCENSION NO. 37

UPLER AIR DATA
1780030037
JALLIN

TABLE 26 Cont'd

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DIRECTION (DEGREES (IN))	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	161.9	-62.5		267.7	565.5	240.0	50.4	1.000060
44500.0	157.9	-62.6		261.4	565.3	249.3	50.7	1.000058
45000.0	154.1	-62.8		255.2	565.0	248.5	50.9	1.000057
45500.0	150.4	-63.0		249.2	564.8	247.2	51.0	1.000056
46000.0	146.7	-63.5		243.6	564.0	245.0	51.1	1.000054
46500.0	143.1	-64.1		238.5	563.2	244.5	51.0	1.000053
47000.0	139.6	-62.3		230.7	565.6	243.2	51.0	1.000051
47500.0	136.3	-61.3		224.0	567.1	245.0	50.8	1.000050
48000.0	133.0	-60.2		217.5	568.5	246.8	50.7	1.000048
48500.0	129.8	-58.8		210.9	570.4	243.4	50.0	1.000047
49000.0	126.7	-58.5		205.6	570.8	252.2	49.3	1.000046
49500.0	123.7	-59.2		201.4	569.9	254.5	48.1	1.000045
50000.0	120.7	-58.8		196.2	570.3	250.5	46.8	1.000044
50500.0	117.8	-59.0		191.7	570.1	257.5	45.2	1.000043
51000.0	115.0	-59.7		187.7	569.2	257.8	43.2	1.000042
51500.0	112.2	-60.3		183.7	568.3	257.4	41.9	1.000041
52000.0	109.6	-61.0		179.9	567.5	255.2	42.3	1.000040
52500.0	106.9	-61.3		175.6	567.1	255.1	42.8	1.000039
53000.0	104.3	-60.9		171.5	567.5	255.5	43.0	1.000038
53500.0	101.8	-60.8		167.1	567.6	255.5	43.1	1.000037
54000.0	99.4	-61.4		163.5	568.9	253.0	42.3	1.000036
54500.0	97.0	-62.1		160.0	568.0	252.0	40.7	1.000036
55000.0	94.6	-62.3		156.4	565.7	250.9	39.0	1.000035
55500.0	92.4	-61.2		151.6	567.1	250.6	35.3	1.000034
56000.0	90.1	-60.2		147.4	568.6	250.0	31.5	1.000033
56500.0	88.0	-59.1		143.2	570.0	250.7	26.5	1.000032
57000.0	85.9	-58.0		139.0	571.4	251.5	19.5	1.000031
57500.0	83.8	-58.9		136.5	570.2	252.6	12.4	1.000030
58000.0	81.8	-59.8		133.6	569.0	249.2	8.0	1.000030
58500.0	79.8	-60.8		130.9	567.8	250.4	6.0	1.000029
59000.0	77.9	-61.7		128.5	566.5	243.0	4.6	1.000029
59500.0	76.0	-62.6		125.6	565.5	243.0	7.0	1.000028
60000.0	74.2	-62.5		122.7	565.4	242.0	10.7	1.000027
60500.0	72.4	-62.2		119.6	565.8	245.2	14.3	1.000027
61000.0	70.6	-62.0		116.5	566.1	240.6	17.7	1.000026
61500.0	68.9	-61.8		113.6	566.4	249.1	21.1	1.000025
62000.0	67.3	-61.6		110.6	566.6	243.5	22.5	1.000025
62500.0	65.7	-61.4		108.0	566.8	245.5	23.4	1.000024
63000.0	64.1	-61.3		105.5	567.1	244.6	23.3	1.000023
63500.0	62.5	-61.0		102.7	567.4	250.5	20.2	1.000023

GEOMETRIC COORDINATES
33.10712 LAT DEG
106.49511 LONG DEG

UPLER AIR DATA
1280000000
JALLEN

STATION ALTITUDE 4051.00 FEET MSL
8 MAY 62 0925 MDT
ASCENSION NO. 37

TABLE 26 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CURIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED (KNOTS)	INDEX OF REFRACTION
64000.0	61.0	-59.8		99.7	569.0	238.1	1.000022
64500.0	59.0	-58.6		96.7	570.0	235.1	1.000022
65000.0	56.1	-57.7		94.0	571.8	230.1	1.000021
65500.0	50.8	-58.3		92.0	571.0	210.4	1.000020
66000.0	55.4	-58.9		90.1	570.2	195.3	1.000020
66500.0	54.1	-57.9		87.0	571.5	190.9	1.000019
67000.0	52.8	-55.5		84.0	574.7	191.2	1.000019
67500.0	51.6	-55.4		82.5	574.9	191.5	1.000018
68000.0	50.4	-55.7		80.7	574.5	193.9	1.000018
68500.0	49.2	-55.0		78.9	574.1	197.4	1.000018
69000.0	48.0	-50.3		77.2	573.7	202.3	1.000017
69500.0	46.9	-56.6		75.4	573.5	210.0	1.000017
70000.0	45.8	-56.9		73.0	572.9	219.3	1.000016
70500.0	44.7	-57.2		72.1	572.5	222.3	1.000016
71000.0	43.7	-57.0		70.4	572.0	221.0	1.000016
71500.0	42.6	-55.8		68.3	574.4	219.5	1.000015
72000.0	41.6	-54.6		66.4	576.0	220.4	1.000015
72500.0	40.7	-53.3		64.5	577.0	222.1	1.000014
73000.0	39.7	-52.1		62.0	579.2	223.9	1.000014
73500.0	38.8	-51.7		61.0	579.8	240.1	1.000014
74000.0	37.9	-51.6		59.0	579.9	205.7	1.000013
74500.0	37.0	-51.6		56.2	579.9	200.3	1.000013
75000.0	36.2	-51.5		50.9	580.0	320.5	1.000013
75500.0	35.4	-51.5		55.0	580.1	61.0	1.000012
76000.0	34.5	-51.4		54.3	580.1	197.3	1.000012
76500.0	33.7	-51.4		53.0	580.2	206.2	1.000012
77000.0	33.0	-51.3		51.0	580.3	217.1	1.000012
77500.0	32.2	-51.3		50.0	580.3	220.4	1.000011
78000.0	31.5	-51.2		49.4	580.4	230.0	1.000011
78500.0	30.7	-51.2		48.2	580.5	234.0	1.000011
79000.0	30.0	-51.1		47.1	580.5	239.0	1.000010
79500.0	29.3	-50.9		46.0	580.8	245.0	1.000010
80000.0	28.7	-50.7		44.9	581.0	259.4	1.000010
80500.0	28.0	-50.5		43.0	581.3	270.2	1.000010
81000.0	27.4	-50.3		42.0	581.0	269.4	1.000010
81500.0	26.8	-50.1		41.0	581.8	270.4	1.000009
82000.0	26.1	-49.9		40.0	582.1	270.7	1.000009
82500.0	25.5	-49.7		39.0	582.4	270.9	1.000009
83000.0	25.0	-49.5		38.9	582.0	281.0	1.000009
83500.0	24.4	-49.3		38.0	582.9	284.3	1.000008

STATION ALTITUDE 4051.0 FEET MSL
8 MAY 82 0925 MDT
ASCENSION NO. 37

UJ PER AIR DATA
128000000
JALLEN

TABLE 26 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION (IN) SPEED KNOTS	INDEX OF REFRACTION
04000.0	23.8	-48.9	37.0	583.4	291.2	12.2	1.000000
04500.0	23.3	-48.5	36.1	583.9	290.4	12.9	1.000008
05000.0	22.8	-48.1	35.2	584.5	304.7	13.0	1.000008
05500.0	22.3	-47.7	34.4	585.0	307.2	13.2	1.000008
06000.0	21.8	-47.3	33.6	585.5	306.6	11.9	1.000007
06500.0	21.3	-46.9	32.7	586.0	310.4	10.7	1.000007
07000.0	20.8	-46.5	31.9	586.5	309.2	9.0	1.000007
07500.0	20.3	-46.1	31.2	587.1	304.6	7.0	1.000007
08000.0	19.9	-45.8	30.4	587.5	290.6	5.2	1.000007
08500.0	19.4	-45.7	29.7	587.6	276.5	4.9	1.000007
09000.0	19.0	-45.5	29.0	587.7	250.6	6.5	1.000006
09500.0	18.6	-45.4	28.4	587.9	243.3	8.5	1.000006
90000.0	18.1	-45.3	27.7	588.0	247.2	10.7	1.000006
90500.0	17.7	-45.2	27.1	588.2	244.2	13.0	1.000006
91000.0	17.3	-45.1	26.5	588.3	244.2	15.4	1.000006
91500.0	16.9	-45.0	25.9	588.5	242.1	16.9	1.000006
92000.0	16.6	-44.9	25.3	588.6	240.6	16.1	1.000006
92500.0	16.2	-44.8	24.7	588.8	235.0	15.3	1.000005
93000.0	15.8	-44.6	24.1	588.9	237.3	14.8	1.000005
93500.0	15.5	-44.5	23.6	589.1	230.6	15.7	1.000005
94000.0	15.1	-44.4	23.1	589.2	233.3	16.6	1.000005
94500.0	14.8	-44.3	22.3	589.3			1.000005
95000.0	14.5	-43.8	22.0	590.0			1.000005
95500.0	14.2	-43.3	21.4	590.6			1.000005
96000.0	13.8	-42.8	20.9	591.3			1.000005
96500.0	13.5	-42.3	20.4	591.9			1.000005
97000.0	13.2	-41.8	19.9	592.6			1.000004
97500.0	12.9	-41.3	19.4	593.2			1.000004

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 62 0925 MDT
 ASCENSION 110. 37
 MAGNETIC COORDINATES
 33.10/12 LAT DEG
 106.49511 LON DEG

MANDATORY LEVELS
 1280030037
 JALLEN

TABLE 27

PRESSURE GEOPOTENTIAL MILLIBARS	FELT	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
					VELOCITY (MPH)	SPEED KNOTS
850.0	4930.	15.5	-6.1	22.	147.0	3.5
800.0	6624.	15.6	-6.0	21.	190.4	7.2
750.0	8405.	11.3	-9.1	23.	217.2	14.0
700.0	10278.	6.5	-12.1	20.	222.0	19.4
650.0	12252.	.9	-14.0	32.	232.2	20.5
600.0	14340.	-5.1	-16.4	40.	239.9	22.8
550.0	16556.	-11.1	-27.7	24.	242.3	22.7
500.0	18939.	-15.9	-31.3	23.	250.1	21.5
450.0	21514.	-21.9	-35.3	20.	239.4	23.8
400.0	24329.	-26.5	-42.2	21.	248.4	34.2
350.0	27446.	-34.2	-47.2	23.	240.0	34.9
300.0	30939.	-40.3			244.0	34.1
250.0	34935.	-50.0			240.0	33.9
200.0	39000.	-60.6			244.0	43.5
175.0	42310.	-62.2			240.0	51.2
150.0	45431.	-63.0			247.1	51.6
125.0	49142.	-58.9			253.4	40.8
100.0	53709.	-61.2			253.3	42.8
80.0	58273.	-60.7			230.3	0.3
70.0	60981.	-61.9			210.2	10.7
60.0	64123.	-59.0			237.0	14.0
50.0	67905.	-55.8			194.7	10.2
40.0	72564.	-52.5			223.0	4.9
30.0	78093.	-51.1			239.0	13.3
25.0	82598.	-49.5			201.2	11.5
20.0	87431.	-45.8			300.4	3.9
15.0	93736.	-44.4			204.0	10.9

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

